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PART FIRST.

ORIGINAL COMMUNICATIONS.

ART. I.—OVARIOTOMY: by P. J. BUCKNER, M. D., *of Georgetown, Ohio.* (Read, by request, before the Ohio State Medical Society.)

Sometime in November, 1849, when in the city of Cincinnati, I was invited by Dr. Taliaferro, an eminent practitioner, to visit a Mrs. Carter, laboring under ovarian disease. I was informed that she had been under the care of several medical gentlemen, and that there were different opinions entertained as to the true nature of the case.

Mrs. C. is 39 years old, and the mother of several children. On examination, a round tumor was felt through the walls of the abdomen, elastic and movable, with but little sensibility. I felt confident that it was an Ovarian Cyst of the right side, and so expressed myself, which fully coincided with the opinion given by Dr. T., previously. We informed her that a radical cure could only be effected by surgical aid—that her case presented as favorable indications for a successful result as were generally met with; yet, at the same time, we presented the dangers and uncertainties of the operation, and the objections made to it by eminent surgeons. The statistical results, favorable and unfavorable, were fairly stated, and an assurance given that we did not wish to influence her to undergo the operation; but in view of all the facts she must decide for herself.

In January, 1850, I received a letter from Dr. Taliaferro, informing me that she and her friends had determined upon an operation, and inviting me to assist him in its performance. On the 31st of January, we met at Mr. Carter's house, in Cincinnati, and in the presence of Drs. Cooper, Vattier and several students, removed the tumor. Through the the politeness of Dr. Taliaferro, and the consent of the patient, I was selected to operate. It is proper to state that Dr. Vattier, owing to professional engagements, did not arrive until after the operation had commenced.

Operation.— Every thing being arranged, the patient was placed upon the table, at 38 minutes after 2 o'clock, P. M. The abdomen was di-

vided in the linea alba to the extent of eight inches; the tumor exposed to view, presented numerous adhesions by bands of organized lymph. These were carefully divided with the knife. The tumor being free from its attachments, was lifted out of the abdomen, and the pedicle brought to view. This was about an inch in diameter, and arose from the right ovary and broad ligament. The pedicle was secured by a single ligature, and the tumor removed in thirteen minutes. The wound was closed by four intercepted sutures, supported by adhesive strips, and dressed in the usual way, with compresses and a broad bandage. About the time of closing the wound, the woman became faint and sick, and from the efforts to vomit, the bowels protruded, and were with difficulty returned and retained.

8 o'clock, P. M. We found our patient complaining of pain under the umbilicus, pulse 89—give Tinct. Opium xx gtts.—ordered the nurse to administer an enema of gruel, salt and sugar.

Feb. 1, 9 o'clock, A. M.—Pulse 100, small and compressible—pain of abdomen slight, great thirst, tongue moist, skin warm, no discharge from the bowels or bladder, had slept some. Wet the dressings with cold water.

The following notes of the case, its subsequent treatment and symptoms, have been furnished me by Dr. Taliaferro, her attending physician:

10 o'clock, A. M.—Gave two injections of gruel—free discharge of urine—great relief. 11 o'clock,—Pain in bowels—injections passed, but without feculent matter. 2, P. M.—Pulse 96—soft, compressible—thirst immoderate—borborigmus—inclined to dose—tongue moist—some hiccough. Ordered, sulph. Magnesia ij. oz., aqua fervent v oz., acid sulph. gtt. iv., syrup simplex ij. dr., M., a table spoonful given every half hour. 5 o'clock.—sleep refreshing. 9.—Drowsiness—vomiting yellow bile freely. Gave 10 drops Tinct. Opium. At eleven, repeat the laudanum—enemas continued—soon rejected. At 2. A. M., falls asleep—soon awakes with hiccough.

Feb. 2, 9 o'clock, A. M. Pulse 84, small and wiry—tongue dry—no movement of bowels—vomiting incessant—urinated freely—no pain of abdomen upon pressure, except directly over the wound. Ordered, Calomel, x grs., Acetat Morph. $\frac{1}{4}$ gr., Sac. Lac. dr. ss, Creta ppt. grs. xij, M., fiat, Chart v., one every hour. Gum water to drink. 2 P. M. Vomiting at half after one—pulse 80, more volume, soft and compressible—tongue moist—thirst considerable—desires drink—singultus almost constant—taken the five powders, rejected one. Ordered, enemas of corn meal gruel, sugar, and Assafœt., to be repeated every two hours, until purging.

Feb. 3, 10 A. M. Vomits bilious matter, sleeps a few minutes. 11 o'clock.—Bowels operated upon. 8 o'clock P. M.—Bowels moved three times since 11 o'clock—tongue moist—pulse 80—urinates freely—very thirsty—hiccoughs occasionally. R. Cal. grs. v., Sac. Lac., Gum, Arabic, q. s. m. ft. Pillulæ x. One every hour—gum water the only drink.

Feb. 4, 9 o'clock, A. M. Pulse 68—tongue moist—epigastric region much distended—hiccough occasional—vomited yellow bile freely at 1

o'clock—"9 to 10 slept soundly"—(by nurse.) Skin feels well and soft—eyes look well—everything encouraging. Ordered the solution of salts every hour, and enemas every two hours. 3. P. M.—Skin warm, pulse 80, soft—quite restless—severe pain in the lower bowels—tongue dry with urgent thirst—tenesmus—urine flows freely—moans constantly while dosing—removed upper stitch. Gave a teaspoonful of syrup of Morphia—immediately violent vomiting and purging supervened—pain *intense* below the umbilicus. Order, mustard draughts to thighs and wrists. Vomiting ceased at 5 P. M.—resting well—desires *pickles*—apple tea and arrow root allowed.

5th, 8 o'clock, A. M. Expression calm—tongue moist—pulse 68, full and regular—no pain in umbilical region since the removal of the suture—relishes apple tea. 4 P. M.—Frequent discharges of yellow bile from the bowels—griping—pulse 68, firm and regular—tongue dry—stomach and bowels reduced in swelling—doses and awakes moaning—slight thirst, not indulged—syrup of Morphia administered twice.

6th, 9 o'clock A. M. Pulse 80—tongue moist—eyes bright—skin moist and pleasant—dress and bed changed—expresses a desire for oranges—urinated twice freely in the night—removed three more stitches. 5 P. M.—Catamenia supervened at *one* o'clock P. M.—some headache—pulse 80, regular—rather nervous, restless—tongue moist—complains of sinking—bowels moved to-day and "natural," so says nurse.

7th. Medicines continued, symptoms improving.

8th, 10 o'clock A. M. Did not rest so well last night—skin warm—no thirst—tongue moist—some soreness of the bowels—pulse 92—no action upon the bowels since the 6th. Ordered, solution sulph. Magnesia, two teaspoonfuls every hour, until purging.

I deem it unnecessary to detail further the symptoms and treatment as they occurred from day to day. It will be sufficient to state, that the wound healed kindly, although the general symptoms, at times, were alarming, On the 10th of March, thirty-nine days after the operation, the ligature upon the pedicle was removed; and our patient was able to walk about the room. She is now in the enjoyment of her usual health. Too much praise cannot be awarded Dr. Taliaferro for his unremitting and faithful attention to the case, and especially for his prompt and efficient aid in combatting the many dangerous symptoms.

In the October number of the Western Lancet, for 1848, I reported the case of Mrs. Lawrence, upon whom I operated for ovarian tumor in April, 1848. I am happy to inform the profession, that after a lapse of more than two years, the lady is in the enjoyment of good health—menstruates regularly, and has no symptom of a return of the disease. Indeed, she informs me that she knows no difference in her feelings now, and when enjoying her usual health, previous to the appearance of the disease, except a diminished sexual desire.

I allude to this case now, only to adduce a statistical fact in favor of the operation, as one of the objections urged by those who oppose it altogether, is the liability of the disease to return, or the frequent failure

to complete a cure. This question can only be settled by a comparison of results, favorable and unfavorable, drawn from the aggregate of faithfully reported cases. Hence the necessity of reporting the unsuccessful, as well as the successful cases.

In a note appended to the report of the Lawrence case, I alluded to the case of Mrs. W——s, of Kentucky, who died on the sixth day after the operation, from peritoneal inflamation, and promised, at some future period, to give a more detailed account of the case.

I first saw the lady in consultation with Dr. A. D. Keith, of Augusta, Ky., about the last of April, 1848. Through the parietes of the abdomen, we could feel two distinct solid tumors. One occupied the umbilical region, and was movable, floating from side to side. The other, of much larger dimensions, was stationary and occupied the hypogastric and right and left iliac regions, and felt as if it were firmly wedged in the superior strait of the pelvis, and was more tender to the touch than the former.

I found the vagina much shortened, the cervix uteri unusually elongated, and the os resting behind the symphisis pubis. The superior strait was filled with a hard, uneven and immovable tumor, dipping into the pelvis, and filling the hollow of the sacrum. I attempted to poise on my finger, and push it above the linea innominata, but could not move it, the effort producing pain. The rectum was flattened from the pressure of the tumor on its anterior face. The tumor was distinctly felt through the walls of the rectum, presenting a firm and irregular surface. I placed the patient upon her knees, with the head and shoulders at an angle of 45°, and attempted to dislodge the tumor from the pelvis. The effort produced considerable pain, with very little, if any, alteration in its position.

I gave as my opinion, that there was a tumor of the left Ovary, (probably fibrous in character,) complicated with disease of the uterus, and advised against the operation.

The lady being very anxious to have the tumor removed, and neither Dr. Keith or myself feeling fully satisfied that the uterus was seriously involved, a further consultation was advised. Wm. T. Taliaferro, M. D., of Cincinnati, was selected as the additional counsel. On the 25th May, Drs. Keith, Taliaferro and myself met, and after a careful examination of the case, Dr. Taliaferro gave his opinion that there was certainly disease of the left Ovary, and probably of both, that the tumors were of the solid kind, *and that the Uterus was not diseased;* and he thought the case such an one as warranted the operation. Dr. Keith assented to this opinion, to which the lady added her earnest desire to have the operation performed. It was then decided that Dr. Keith should superintend the preparatory and subsequent treatment, and that I should perform the operation. She was accordingly put under the appropriate treatment.

On the 15th day of June, we assembled, and the operation was performed. Dr. Taliaferro was not present, but it is due his merited reputation to say, that the result proved the correctness of his diagnosis, "that the uterus was not diseased."

Operation.—Commenced at 10 o'clock, A. M., in presence of Drs. George W. Mackey, A. D. Keith, T. M. Tweed, William Buckner and

W. G. Keith, and Mr. J. C. Winters, student. The husband and a few select friends, principally females, were also present. The abdomen was divided in the linea alba, from the umbilicus to within an inch of the symphisis pubis. The superior tumor immediately protruded through the wound, and along with it, the bowels literally *gushed out.* They, together with the Omentum, were supported and drawn out of my way by an assistant. I very readily found the pedicle of the superior tumor, not larger than my thumb, attached to the side of the lower tumor. This was ligated and the tumor removed. The tumor was Ovoid in shape, perfectly smooth, and of fibrous character, and about the size of the head of a full grown fœtus. The remaining tumor, which was much larger, filled the entire pelvis—was irregular in its out lines—the surface tuberous. It was with difficulty lifted from its bed, although no adhesions existed. The pedicle was short, fleshy and about *three* inches broad, arising from the left fallopian tube and broad ligament. The Ovary being in a diseased state, the graafian vesicles large and of a livid color, and a number of hydatids in the formative stage, it was deemed best to remove the left Ovary with the tumor. A ligature was therefore passed around the Ovary, embracing the fimbriated extremity of the fallopian tube, (which was also in a diseased state,) and tied. The next step was to secure the hemorrhage from the pedicle, and divide it. From its large size, it was deemed impracticable to encircle the whole in one ligature, or to even trust to a double ligature. tying it in two equal parts. To facilitate the sloughing, and the removal of the ligatures, and more perfectly to control the hemorrhage, the pedicle was litigated in four equal parts. During the act of fixing and tying the ligatures, the patient suffered great pain from the traction absolutely necessary to enable us to perform the manipulations—the neck being unusually short. The ligatures all being secured, the tumor, a part of the fallopian tube, and left ovary were detached with the knife and removed. All coagula, and extraneous fluid, were carefully removed by soft sponges—the ligatures arranged and brought out at the lower angle of the wound—the bowels and Omentum returned, and the edges of the wound neatly approximated, and retained by five interrup ed sutures, the intermediate spaces supported by strips of adhesive plaster; lint, compresses and a roller bandage, neatly adjusted, completed the dressing, and the woman was placed in bed in thirty-five minutes after the first incision. The patient became sick before the operation was completed, made efforts to vomit, and just as she was placed in bed, fainted. Animation was soon restored, pulse rose to 112, and for the first twenty-four hours she was comparatively comfortable. The subsequent treatment was conducted by Dr. A. D. Keith, an experienced and highly reputable physician, and although it was strictly such as was proper, in spite of every means the case terminated fatally on the 6th day after the operation, from peritoneal inflamation.

I am satisfied that there was nothing in the character of this case, which rendered it more likely to prove fatal, than the case of Mrs. Lawrence, except the large size of the pedicle, and the solid or fibrous character of the tumor. In Mrs. L's case there were extensive adhesions to overcome, the tumor was much larger, and the constitution of

the patient impaired; in the present case there were no adhesions, and a firmer constitution. I, therefore, conclude that the removal of solid tumors is more frequently followed by a fatal result, than the removal of encysted tumors. This may be owing to the fact that the pedicles of fibrous tumors, as a general thing, are larger and more vascular than the encysted, and consequently greater injury is done the peritoneum, hence their greater fatality. If observation should prove this conclusion to be correct, it will be an important fact to guide us in the selection of cases most favorable for operation.

From a conviction that this will some day, not far distant, be ranked among the legitimate operations in surgery, notwithstanding the opposition it has met with from men of the first standing in the profession. I throw out these suggestions in hopes to stimulate my professional brethren to the further investigation of the subject. From the many cases of this disease, which have fallen under my own observation, within the limits of a country practice, I feel confident that it is of much more frequent occurrence than is generally supposed by the medical profession at large.

ART. II.—*Case of Diseased Genito—Urinary Apparatus*, by H. C. SKIRWIN, M. D., of Walton, Boone Co., Ky.

On March 4th, 1850, I was called to see Essick, a colored man, aged 78 years, of the common size; he was quite stout and healthy until about fourteen years ago, when he had a very severe attack of fever and cystitis. At that time he was working in a hemp factory, and had been for some time—since then has suffered much from asthma, with frequently a difficulty in voiding urine, and has ever since remarked a tumor or protusion in the hypogastric region, which he mistook for Hernia, and actually wore a bandage around the lower portion of the abdomen till his death. The symptoms, at the time I first visited him, were slight fever, with a chill occasionally, tongue covered with a light white coat, pulse quick, small and often intermittent, ranging from 70 to 110, according to the pain, great difficulty in passing urine at times, when the attempt was accompanied with intense suffering; appetite not good, extremities often cool. Thus the case continued from day to day, but growing worse, cathartics, diuretics and anodynes were prescribed and administered, but without any perceivable benefit. Two other doctors were called in; we all examined him, but did not suspect that the protrusion, of which I have spoken, was the bladder, although we recommended diuretics and catheterism, but the patient was so very much opposed to the introduction of the instrument, that it was not attempted. For the last three days before death, the extremities and even the abdomen became much swollen, as in cases of dropsy. Thus the case progressed till the 11th of March, when death put an end to his sufferings at 4 o'clock P. M. Twelve hours after death autopsy took place. The brain was first examined; the superficial veins presented considerable congestion, the arachnoid membrane over the inferior portion of the cerebrum exhibited slight opacity, ventricles full of serum, and effusion

of serum in the arachnoid cavity, amounting in all to 4 or 5 ounces. Lungs were diseased—more than half of each was hepatised, with many strong, firm adhesions to the costal pleura; there were also a quantity of tubercles—some of which were softening. The heart was about twice as large as usual, being in a state of hypertrophy, with its valves and a portion of the beginning of the aorta and pulmonary arteries ossified, some of the ossific depositions weighing more than half an ounce. A large collection of straw-colored serum in the cavities of the pericardium and pleura. All of the abdominal organs were in a normal condition, but the kidneys, ureters and urinary bladder. Before cutting into the bladder, a catheter was attempted to be introduced some 4 or 5 times, but the attempt failed; there was a barrier which we could not overcome. On cutting into the organ we found between five and six pints of blood and urine in it, almost fluid, except a coagulation of some 3 or 4 ounces. The parieties of the bladder were very thick, looking much like the impregnated uterus, with many strong adhesions to the surrounding parts. We found a tumor just over the vesical extremity of the urethra, and falling down and closing the opening firmly as a valve, weighing 3 ounces, and which I have preserved. The kidneys were slightly enlarged, containing many cysts; the ureters were somewhat enlarged and inflamed in patches; the penis much inflamed and swollen.

ART. III.—*Two Fœtuses of Unequal Development in the same Uterus*, by Dr. S. B. DAVIS, of Franklin county, Ohio.

On the third day of April, of this year, I was requested to visit Mrs. G———, who, a few days previously, had had an attack of remittent fever. She was just entering the seventh month of pregnancy; had borne four living children, besides suffering a great many abortions, the number of which she could not remember. She possessed the *habit* and accordingly, was going to miscarry again. Pains had come on during the early part of the day, and when I arrived, labor had progressed too far to be arrested. A short time after I entered her room she gave birth to a large child of the age above mentioned.

Hemorrhage, to an alarming degree, following, I proceeded without delay to the manual delivery of the placenta, which I found partly protruding into the vagina, and embraced by the ostincæ. This operation was attended with much difficulty, as there was firm adhesion of that portion of the after-birth, remaining in the uterine cavity, and until its attachment was broken up, it obstinately refused to budge an inch from the position into which it had been thrown, by the contractions of the womb. It finally yielded, and was brought away, but upon examination, I found that it was not entire—a portion had remained behind, to increase my perplexity and the woman's danger.

Returning to the task, I was greatly surprised to find presenting at the os uteri, the sac of a second fœtus. Slight pains recurring at this time, the membranes were soon ruptured, and the little fœtus came down. The cord by which it was attached, being too short to admit of

its entire expulsion, and the flooding continuing unabated, I forcibly brought it away. At last—in the idiom of the lying-in room—the *woman* was "cleared," and though she had lost much blood, and consequently was much exhausted, she eventually did well. The two placentæ were doubtles partially amalgamated—the first delivered being detached from the second, partly by the contractions of the uterus, and partly by my own efforts in bringing it away—which accounts for the appearance it presented of being torn on one of its edges, and which appearance induced me to think that a portion of it was yet tarrying *in utero.*

The second fœtus proved to be of about six weeks growth. Its whole appearance was fresh, without a sign of putrefaction. The *fumis umbilicalis* had a fresh, plump, healthy appearance, and its vessels were patulous and contained blood. Had it been the only child contained in the uterus, I would, unhesitatingly, have pronounced its birth an abortion, at quite an early period of gestation.

Such is the history of a case, which, it is true, is not without a parrallel in the annals of Obstetrics. Such cases, however, are perhaps as rare, as the attempted solutions of the phenomena which they present, are unsatisfactory. When did the conception of the minor fœtus occur? Was it during the fifth month of pregnancy? This can only be admitted by the supporters of the theory of absorption—those who believe that the semen is absorbed, taken into the circulation and carried to one of the Ovaria, *via* the heart and lungs, in search of a particular Ovulum, which, having found, "it vivifies, by some mysterious agency, and thus starts forth the future man." It has been suggested that if this theory be true, impregnation might be produced by injecting the seminal fluid into a vein of the female.

According to the the theory, however, which almost universally obtains, a second impregnation cannot take place, except in cases of double uterus, unless it occur prior to the formation of the deciduous membrane which lines the cavity of the uterus throughout—stretching across the the cervico-uterine orifice—very soon after conception. If, in order to produce conception, it be necessary that the seminal fluid shall come in contact with the ovule, and if it can only reach its destination by traversing the uterus and one of the fallopian tubes, how is it possible for a second impregnation to occur, after the formation of the *membrana caduca?* Then, as if to shut out every possibility of such an event, there is the tough gelatine secreted by the *glandulæ nabothi*, plugging and sealing up the mouth and neck of the uterus. But *superfœtation* is possible, provided it occur before these changes take place in the uterus, as various cases already reported would go to prove. A white woman, at Charleston, South Carolina, in 1714, was delivered of two children, one black and the other white.—(Buffon.) Moseley, Dewees and others have recorded similar cases. The most recent, perhaps, is the case reported by Dr. R. Carter, of Virginia; in a letter to one of the Editors of the *Medical Examiner:* A negro woman, "as black as the ace of spades," gave birth, in Feb., 1849, to two children, one was as black as negro children usually are, the other was mulatto. No perceptible difference in the growth and development of the two children, is reported

to have been observed in any of these cases. We are led, however, to the belief that two separate connexions *may* be productive of twins, if there be but a short time intervening between them.

In the case which I have detailed, the fœtuses were of unequal growth and developement; the one was of seven months growth, the other of not more than as many weeks. If it be not a case of superfœtation—and but few would doubt it to be such—how explain the fresh, healthy appearance of the minor fœtus? Prof. Miller, to whom I gave a history of the case, supposes it to be one of twin pregnancy, in which one of the fœtuses lost its vitality at an early period, but was, nevertheless, retained in the uterine cavity until expulsive action came on. "In such cases," he says, "where the defunct fœtus is retained, it is generally, if not always, preserved from putrifaction by its proximity to, and connexion with the surviving fœtus." He refers to "Practical Observations in Midw.," by John Ramsbotham, part II, p. 380, who says: "It appears to me that the continuance of those functions (of that living energy,) by which fœtal life is sustained and matured, imparts a *something* to the lifeless ovum, sufficient to counteract the the effects of the putrefactive process." Francis H. Ramsbotham but borrowed the opinion from his father, when he, in his "Process of Parturition," wrote: "Perhaps it (the fresh appearance of the minor fœtus,) may be accounted for by the powerful vital principle resident in the gravid uterus, and which is in fervid operation for the purpose of bringing to perfection the living being it contains—protecting the dead mass from the ordinary changes of decay." He thinks, too, that its never having come in contact with the external air may have had some influence in preventing putrefaction.

These explanations do not appear to be at all satisfactory. It is not easy to conceive how the vital force, directed and expended for the sustenance and maturation of the one fœtus, can have any influence over the remains of its defunct brother; or how the powerful vital principle resident in the gravid uterus, can protect a "dead mass" from the putrefactive process. These views also involve an infraction of those laws of nature which ordain the decomposition or putrefaction of the animal organism whenever vitality shall have become extinct. How then can we account for the phenomena presented by these cases?

I have said, in the history of the case which I have just given, that the funis of the minor fœtus presented a fresh, plump appearance, and that *its vessels were patulous and contained blood.* Now is not this sufficient evidence that the circulation between it and the mother had continued up to the hour of delivery? And is it not equally evident that the fœtus had not lost its vitality? Is it not more reasonable to suppose that from some cause affecting the mother's system, or the fœtus, or its placenta, the supply of blood, intended for the nourishment and maintenance of the embryo, was *diminished* to such a degree as to check its growth and development; yet enough remaining to

"Keep in a little life,"

and to maintain it in *statu quo*, than that death had visited it at an early day, and that it remained a "dead mass" within the uterine cavity, for

several months prior to its expulsion, without undergoing the least change in the structure, *preserved in good condition* by a *something* communicated to it by the fervidly operating vital principle resident in the gravid uterus? Could the *vis vitæ* have ceased its attentions to the embryo, or death taken his abode there, while the circulation continued between it and the mother? Is not the circulation itself a manifestation of vitality?

I am not prepared to say that this is the only admissible explanation of the phenomena which these cases present. In this our day, no theory, that is not established by induction, is allowed even an ephemeral existence; or if it live at all, it is only in the imagination of its originator. I do not expect, I dare not wish to *establish* a theory, by observations made of a solitary case. If my views meet with but a modicum of favor, or should direct attention and inquiry to the subject, my wishes will be abundantly satisfied.

PART SECOND.

AMERICAN INTELLIGENCE.

ART. I.—*Treatment of Dysmenorrhœa by Quinine and Prussiate of Iron.* By H. A. BIGNON, M. D., of Augusta, Ga.

The frequent occurrence of Dysmenorrhœa, and its painful and intractable character, render it a subject of deep interest to the physician. As the most approved modes of treatment often effect little more than a slight palliation, I am induced to report a few cases treated with Quinine and Prussiate of Iron, in the hope that others may be induced to test these remedies in similar cases.

CASE 1. About the first of July, 1848, I was called to see Celia, a negro woman about 28 years of age, and of very delicate constitution: she was then laboring under Dysmenorrhœa, and on inquiry I found that she had been affected with it for some nine years, during which time she had been under the treatment of several physicians, and as far as I could learn, had been put on the use of purgatives, tinct. of guiaicum, and all the usual remedies, with only slight relief, if any, I immediately prescribed a warm hip bath with mustard, and 10 grs. of Dover's powder, under the influence of which she was not long in falling to sleep, and got a good night's rest. On my visit the next day I found the pains had returned, and she was suffering very much. I suspected the existence of a clot, from the character of the pains, (resembling those of labour,) and immediately gave her a tea-spoonful of wine of ergot, and repeated the dose about every ten minutes, until she had taken three spoonsful, after which she passed a clot about the size and shape of an almond, to the entire relief of all her sufferings. I prescribed another hip bath and 10 grs. of Dover's powder for the night, and left her,

I did not see my patient again until about two weeks after, when she came to see if I could not give her something to prevent her suffering so much at the next approach of the catamenia. I put her on the use o

pills, consisting of 3 grs. of Quinine and 3 grs. of Prussiate of Iron, of which she was to take one three times a day, and gave her a mixture of camphor (Dewees') to take, in case she suffered much at the next period, and not see her again until about one week after she had had a return of the discharge, (making about three weeks since my last interview with her,) when she came to get more of the pills, saying that she thought they had helped her a good deal, but not cured her. I made another box of the pills, and kept her on the use of them for the space of about six months, when she came to me quite another looking woman, and entirely free from the disease. I have seen her frequently since, and she continues well.

Case 2. Maria, a negro woman aged 32 years, and of slight frame, applied to me in the month of September, 1848, for the relief of Dysmenorrhœa, which she had had since a cold caught after confinement about seven years previous. As the case was very similar to the preceeding one, I will not go into a detail of it, but merely say that I put her upon the same treatment, and in the space of about seven months I had the gratification of seeing her quite well again.

Case 3. Ann, a negro woman, aged about 20 years, well made and of large stature, applied to me in the month of November, 1849, for the relief of Dysmenorrhœa. The case was similar to the others, excepting that Ann was then nursing a child of three years of age, and also complained more of pain in the back than did the others. I put her upon the same treatment as the other cases. with the addition of a blister to the sacrum and made her wean the child. This case is under my care at this time, and at the last period she says that the discharge was quite natural, and that the pain was scarcely to be felt.—*Southern Medical Journal.*

Art. II.—*Convulsive Intermittent Fever.* By Henry A. Ramsay, M. D.

Notwithstanding the antiquity of the subject, anything pertaining to intermittent fever, should elicit the attention of the Southern physician, involving as it does, nearly three-fourths of the cases which come under his observation, in some of its multifarious forms. It is true, much has been written and ably said, upon the subject of intermittents, but it is equally true that much remains yet to be said and learned. Among the many forms of intermittent fever spoken of by writers upon practical medicine, we do not remember to have seen any account of the convulsive form of the *cold stage*, or in other words, the *chill* or *ague* superseded by a *spasm* or *convulsion*. This variety of intermittent has been so common in this section of the country for several years that we have long since ceased to regard it as a deviation from the common routine of febrile disease. This fact has increased our surprise, that it is not adverted to by our modern writers upon practical medicine; particularly Drs. Watson and Wood. By reference to the works of Thomas, Hosack, Tweedie, the Encyclopœdia Pract. Med., Eberle, Armstrong, Dewees, Gregory, McIntosh and Johnson, we find convulsions in the hot stage treated upon, but in no instance do we see any mention of the

convulsion in the *cold stage.* Now we venture to predict that no physician of any experience, in this State, has failed to observe more or less well defined cases of the affection we are now treating, every autumn. This form of intermittent does not vary materially from any other form, only in the peculiar feature of characterizing the *chill* by a *fit* or *spasm.* The duration of the spasmodic paroxysm is generally not longer than an ordinary *chill,* and in many instances it subsides with as much facility, and as little detriment to the nervous centres. There is, however, a very violent form of it, evidently superseding *congestive chill,* which wrecks the nervous system so powerfully, that a resort to the most formidable remedies known to the profession, is imperatively demanded to rescue the patient from the grave. These casts of mildness and malignancy are common to all febrile affections, and we merely advert to them, to exemplify the various grades of the disease, and their usual influence upon the physical economy. In a large majority of cases of convulsive intermittents, the prognosis is very favorble, while in the malignant form it is unfavorable, the danger being during the paroxysm. The symptoms in all cases similate those of *ordinary* and *congestive chill;* only as above observed, instead of a *chill,* the patient is *spasmed* or *convulsed;* he is never stentorous, but is *stupid* or *frantic,* with muscular twitching of the *face* or *body;* and often, but not invariably, the limbs are flexed and contracted, with a cold *nose,* hands and feet, which sometimes present a purplish hue. No *age, sex* or *color* is exempt from its attacks, but negroes and children seem to have it oftenest, which is owing, probably, to the fact of the preponderance of the spinal, over the cerebral system. The disease is produced by the same causes which conspire to create usual intermittents or common *chill,* and it generally presents a quotidian or *tertian type,* with as much certainty as to time of *supervention,* in its diurnal returns. But as we do not intend now to enter the arena of abstruse speculation as to the causes of intermiitent fever, we will exemplify the character and treatment of convulsive intermittent by a reference to several cases, from the many now fresh in our memory.

Case 1. We were called in August, 1844, to see a stout young negro man, of 25, who was foddering, and fell suddenly convulsed in the *field;* as it was not near by, he had become rational before our arrival. We found him *cool,* pulse soft and rising, tongue white and coated, some nausea and thirst; he said, the day before, at 10 o'clock, he felt a little cool. We suspected a chill, and prescribed calomel for the night, thirty grains of Quinine, to be taken before 10 o'clock next day. The paroxysm took place, and came two hours before we anticipated, consequently he had another "*fit.*" We were called in haste, found him sweating when we arrived, with a bounding pulse and warm surface; tongue had somewhat cleaned from a good operation of the calomel; as he had but cephalalgia we ordered quinine every two hours during the *night.* We left and called next morning at 10 o'clock, found patient sweating, warm and no fever, he missed the "*fit,*" took quinine the next day and had a speedy recovery.

This was evidently a case of simple convulsive intermittent, which always yields readily to the quinine practice, judiciously administered.

The quinine is a specific in this disease, but notwithstanding its great anti-periodic powers, it leaves the system very susceptible to relapses, and we doubt not, under some circumstances, it will even produce *chill*. This opinion is at war with the doctrine of the day, but that does not impair its truth. And here, we will remark, when we speak of quinine as a specific, we mean always, when used judiciously, and with reference to the patient's habits, constitution and morbid condition.

Case 2. We were called in haste to see Joe, a negro boy belonging to Mr. P. The patient was stout and athletic. 18 years of age. For three successive days he had a *fit*, but such was the harmless nature of them, the owner thought upon giving him an active cathartic, he would convalesce, but upon the fourth supervening, he sent for me. The *spasms* came on in regular quotidian succession at 1 o'clock, P. M. The paroxysm had subsided when I arrived. I ordered him 40 grs. of quinine to be taken from 10 o'clock at *night* to 1 o'clock next day. The prescription was carried out with fidelity, the patient immediately got well, and had no return during the fall, this attack being in September, 1845.

Case 3. Called to see, Oct. 8th, 1848, Mr. ——, a young man of 22 years. He had had repeated attacks of chill during the months of August and September. At the time we were called, he was taken with convulsion followed by *stupor*, *cold surface* and *thready pulse*. We remained during the night, cupped his spine freely, and put him upon small portions of calomel every three hours; the calomel passed off, producing copious consistent hard discharges. On the 9th he was rational; we prescribed quinine during the day, not enough, however, to produce any degree of tinnitus; we remained the night of the 9th, and kept up quinine in small quantities. The patient, to our surprise, had, on the 10th, at 8 A. M., a "*spasm*," followed by some stupor, but this passed off in several hours. On the 11th, we put him on quinine in increased quantities, and continued it assiduously until the 12th, 1. P. M.; the patient had no return, but convalesced slowly and has had no form of fever to the present time. The muscles of the face in this case twitched, his thumbs were drawn down upon his palms, his countenance distorted, in short he was completely convulsed.

We have not gone into a minute detail of every symptom in the above case, deeming it unimportant, our object being merely to elucidate the general course and treatment of intermittent fever characterized by *spasm* or *convulsion* in the cold stage. The above case is interesting, as it similates epilepsy, and would be esteemed such by many who have failed to observe intermittent specialities. It also creates a suggestion, would not quinine do well in *epilepsy?* This is what a writer in the Jan., 1850, No. of the Journal, denominates epileptic intermittent, he may as well have added an apoplectic and cataleptic form, for one as surely exists in all its peculiar features as the other, with some few symptomatic exceptions. Sometimes persons are attacked suddenly with the disease, they will fall instantly, lie helpless and apparently lifeless, stupid, with contracted features and flexed limbs, and one would be induced to prescribe as is usual in such cases, when an omission of the quinine is as *fatal* as it can be detrimental in a case of real *apoplexy*, or any other affection in which its use is contra-indicated.

Case 4. We were called in August, 1849, to see George, little son of Mr. ——, of this vicinity. He had had repeated attacks of chill during the summer. One morning in August, 10th, he was suddenly seized with a spasm; the father thinking it worms, give him calomel and followed it with oil and turpentine; next morning he was better and able to be up and running about. On the 12th, at 10 A. M., he had a spasm again, and I was sent for. It being near, I found him convulsed, hands clenched, arms rigid, legs drawn up, muscles of the face distortsd, eyes set and rolled back, his pulse quick, skin cold; I ordered a warm bath and followed it by sinapisms to the spine, and in a few hours he was relieved. During the night I gave him calomel and ipecac in small parts, followed by oil. On the 13th I ordered quinine for him, and during the night it was kept up in good doses. On the 14th, he missed the "*fit*" and had a speedy convalescence.

We might go on and enumerate a hundred cases of similar import, but it is entirely unnecessary. The general course of the disease among children is about as we have described above. The infant and octogenarian are alike the victims of its attack, and it is fortunate that although frightful in its aspect, we have a remedy in quinine which rarely fails, and never should be omitted. That some cases die, it would be folly for us to deny, but as a general rule, the disease is quite as managable as our ordinary *chill*, familiarly known to many of us by its annual return as a physical refrigerant visitant, which we receive coldly, and bid a hasty departure. Hoping to see something more upon this subject from some of your readers, we will close this hasty prepared sketch in which we have designedly omitted minute symptomatic details as unnecessary and uncalled for.—*Charleston Journal, July.*

Art. III. *Case of Rupture and Obliteration of the Bladder.—Death in four days.* By E. M. Pendleton, M. D. Sparta, Georgia.

The subject of this unfortunate accident was a fine, healthy boy, about seven years of age, belonging to Dr. Ferrell, of this county. He was lying on the floor of his cabin, about daybreak on Friday morning, the 18th of May, in a sound sleep. A lusty young woman, in walking about the room, trod upon his abdomen. He was lying on his back, and thinks her foot rested above the navel. It occasioned considerable pain, which caused him to awake and cry out. He was not considered seriously hurt, however, until the next morning, when I was sent for (a distance of five miles) to see him. Not being at home, I did not reach the plantation till noon—thirty-six hours after the accident. His pulse was now one hundred and two, and rather feeble; skin preternaturally cool; tongue slightly furred, with some thirst. The tympanitis was considerable, with extreme tenderness over the abdomen upon pressure. He had taken a dose of castor oil, which had produced an evacuation, and had passed some water. His countenance was depressed from pain, but did not exhibit the marks of a case *in extremis*. I ordered warm mustard poultices to the abdomen, a dose of calomel, to be followed in three hours with a table-spoonful of ol. ricini. If the tenderness and

swelling did not subside by 9 o'clock, P. M., to apply a large blister; which was done.

Sunday, 11 *o'clock, A. M.*—Pulse one hundred and twenty-five, still soft and feeble, and extremities cold; tympanitis intense, with great tenderness. Had past no water for nearly twenty-four hours, but had drank a considerable quantity. Medicine had operated copiously—thick, muddy evacuations, with several lumbricoides. Blister had drawn well. Ordered spts. nit. dulc., half teaspoonful every hour, in pumpkin-seed tea, with mustard plasters to extremities.

Monday, 9 *o'clock, A. M.*—Pulse one hundred and six, almost imperceptible, with deathly-cold extremities. Had passed a little albuminous fluid *per urethra*, or, rather, it dripped from him while at stool. Tongue cadaverous; epes a little glary, and countenance shrunk; vomiting a black grumous fluid at intervals. Pronounced him *in articulo mortis*. He succumbed, Tuesday morning, about daylight, precisely four days from the occurrence of the accident.

Autopsy about five hours after Death.—The abdomen still much enlarged, though it had shrunk some. Water had been exuding from the mouth and nostrils, and, upon percussion, the abdomen seemed distended with this fluid. When the knife entered the abdominal cavity, near the navel, the water spouted out nearly a foot high, and continued for a minute or more. The cavity was completely full, and contained about three gallons. After emptying it, we found a considerable quantity of pus in the pelvic cavity, but no appearance of a bladder. This viscus had evidently bursted and become disorganized under a process of inflammation. The stomach, liver and intestines were all healthy. The peritoneum exhibited some patches of congestion and incipient inflammation. The stomach was likewise distended with water.

The most remarkable feature in this case is, perhaps, the fact that the patien lived four days without a bladder. We have reported it for the information it may afford in diagnosis, and not with a hope of educing any practical good from it. There are, I believe, but few such cases on record! and, never having seen one before, I was very much at a loss in forming my diagnosis. I treated it, however, as enteric inflammation, though I deemed the symptoms as equivocal, at the time. One hygienic inference may be drawn from the case, viz: that great caution should be used in producing concussion in that region, when the bladder is distended with water. The membranes, being very delicate, are, as the above case clearly proves, subject to rupture. The probability is, that the result would have been different, if the boy had been awake. As it was, the system was perfectly relaxed. There was no propulsive power about the muscles; and micturition not having taken place for some nine or ten hours previous, the bladder was, doubtless, distended with fluid. The woman was not large, but far gone in her first pregnancy—consequently, was clumsy, and not able to recover readily from an unexpected step. In the attempt to do so, she fell, and is of opinion that not more than a moiety of her weight was brought down upon the boy. At all events, it was a fatal step, and one that teaches us e lesson in reference to the care that should always be taken of so delicate a viscus as the bladder.—*Charleston Journal, July.*

ART. IV.— *Unusual Cases, reported by* FRANK H. HAMILTON, *Professor of Surgery in the University of Buffalo, and one of the Surgeons to the Buffalo Hospital of the Sisters of Charity.*

Maggots in the Ear.—July 14, 1849. Jonah Harvey, aged 24 years, a brick-maker, called upon me and gave the following account of himself: On the 12th inst., at 2 P. M., a "common fly" got into his ear, and in his attempts to dislodge it, the fly was driven farther in, where it remained about three minutes before it was entirely removed. Within 12 hours from this time, Harvey felt something alive and moving in his ear. On the 12th, 26 hours after the fly was in his ear, several maggots dropped out, each about two lines in length. On the 14th, Dr. Lockwood, of this city, removed two, and at 12 M., of the same day, forty-six hours after the occurrence, I removed twenty-one, each one about five lines in length, and very active, so that probably not less than forty maggots were hatched. No more were seen after this. During the time they occupied the meatus, they occasioned constant uneasiness, and sometimes severe pain. Harvey has had a discharge from his ear for many years, which was still continuing at the time of the occurrence, and its odor probably attracted the fly, and induced it to deposit its larves. When the maggots were removed and carefully deposited in a dry box, they ceased to grow, and died in about 8 or 10 hours.

Curious Affection of the Raphe.—A child, aged 3 years, has phymosis and adhesion of the prepuce to the glans penis. There exists, also along the raphe of the scrotum, extending from an inch in front of the anus to the glans penis, an elevated sinus with transparent walls of about the size of a crow quill, closed at both ends, and nearly filled with a whitish, cream-like fluid, which can be seen to pass from one part to another when pressure is made. I opened the sinus at one point, and expressed some of the fluid. The parents had discovered it some time since, but cannot say whether it was congenital.

Dumb but not Deaf.—Henry Streeter, aged 3 years, Oak street, Buffalo, an intelligent looking child. Until three weeks since he could talk "well and plain." He then had a fever, accompanied with convulsions. He has had a discharge from both his ears since he was one year old, which still continues, and was unabated during the fever. He complained, much of the time during the fever, of his head.

Two weeks have now elapsed since his complete recovery, and he has not spoken a word. He answers promptly and correctly all questions put to him, even when addressed in a somewhat low tone, but his answers are made only by intelligent signs. He laughs and shouts, but does not articulate sounds.

In the second vol., p. 574 of this Journal, I have reported the case of a child, eight years old, who was intelligent and healthy, and whose hearing was perfect; she could utter simple sounds, but was unable to articulate more than eight or ten words.

Hair out of Place.—John Armstrong, corner of Eagle and Cedar streets, Buffalo, aged 38, a stucco worker. First noticed, about two weeks before he called on me, an itching on his foot; on examination,

he found a black hair of about the size and color of a cat's "feeler," projecting from the top of the foot, opposite the tarso-phalangeal articulation of the little toe. The thickest part of the hair was outward, and it was about an inch and a quarter in length. He seized it, and attempted to pull it out. He pulled quite hard, until it lifted up the skin and gave him considerable pain, when it broke off about a quarter of an inch above the skin. After this it began to pain him, and now (spring of 1848,) the whole foot is swollen, red and œdematous, and especially tender about the joint of the little toe. It hurts him much to move the joint.

April, 1850, I saw him again, and he says the remainder of the hair worked its way through on the bottom of the foot about six weeks after he called on me; the escape of the hair being preceded by a small pustule. It was about an inch and a quarter in length, and sharpened at the end which first appeared below. The joint, and parts in its neighborhood, are still tender.

Armstrong says a cat with black "feelers," he has occasionally found at his feet in bed, and this hair resembled in color, size, &c., the "feelers" of this cat. He believes it was one of them. He is a man in good circumstances, and was wearing at the time woolen socks and high boots. He is an Englishman by birth, and left England 16 years ago and took up his residence in Georgia, and remained either there or in South Carolina about 4 years; has seen, and often cut out from others the "filaria," and knows this was not of that character. It had no appearance of a head and it was too firm. Besides, it is now 12 years since he left the South, and he has never before had anything of the kind.

Horn on the Face.—Arnold Slocum, aged 50 years, keeper of "Huff's Hotel," Buffalo; complexion florid; a good liver. His mother was fleshy and florid, and had for twenty years or more, a brownish, scaly spot on her face, which her friends suspected was cancerous, yet it never became a sore. She died æt 74. His father, whom Mr. A. Slocum resembles more than his mother, died at 65, and had for many years a sore on the inside of his lower lip. About sixteen years ago, the son, the subject of this notice, discovered a yellowish, branny spot on the inside of his nose. It disappeared about ten years since, but lately it has re-appeared. There is also a similar spot at the outer angle of the eye, which came recently. Nine years ago a spot precisely like this appeared about half an inch below the centre of the right, lower lid, and it remained without material change until a year since, when he pulled the crust off, and the surface bled. From this time a horn commenced growing, which has now attained seven lines in length, narrow at its summit, and about five lines in breadth at its base. It has the color and firmness of horn. Around the base, the skin was elevated to about one line in breadth and height, and was vascular and sensitive.

To-day I excised the horn freely by two elliptical incisions. It did not extend beneath the skin. The hæmorrhage was trivial.—*Buffalo Journal, June.*

ART. V.—*Anomalous Case of Hernia.* By WILLIAM RING, M. D.

William Bedford, a colored man, came under my observation about the 1st of December, at the Erie county work-house. Age about 60, constitution much impaired by exposure. On examination, I found that he had a strangulated inguinal hernia, about twenty years ago, which was relieved by the ordinary operation, since which time he has worn the common truss. My attention was directed to a tumor on the back and middle part of the thigh, near the size of a large cocoa-nut, with fluctuation on pressure, and movable, resembling very much an encysted tumor, so far as external appearances were concerned. He complained of pain up and down the thigh, of difficulty in passing water, and general weakness, and these were much aggravated by walking. The tumor made its appearance at the same time as the hernia, was on the same side of the body, and was about as large as a hen's egg. It remained of that size until last fall, when the hernia accidentally became strangulated again, but was relieved by the taxis, and after this the tumor enlarged to the size mentioned above when first examined. He wished me to extirpate it. In consultation with Prof. Hamilton, we concluded to let it remain as it was. From frequent attacks of diarrhœa, he died on the 18th of March, at the poor-house, whither he had been removed a few days before. By the kindness of Dr. John P. Pride, physician to that establishment, I was permitted to make a *post mortem* examination, fifteen hours after death, Dr. Pride being present with me.

On dissection we found that a knuckle of small intestine, a portion of the ileum, had passed out of the cavity of the abdomen, beneath Poupart's ligament, over the iliacus internus muscle, thence following the conjoined tendon of the psoas magnus and iliacus internus to the trochanter minor of the os femoris, thence passing under the gluteus maximus directly under the fascia lata of the thigh, where the tumor made its appearance. The bowel, where it passed under Poupart's ligament, was on the outside of the femoral vessels, and crural nerve, and two inches from the inguinal hernia outwardly. It passed under the nerve and the femoral artery and vein. The muscular structures were discolored and hardened along the course of the hernia. The intestine had become thickened, and adherent to the adjoining parts, and contracted in its calibre to half an inch, and was filled with the ordinary contents of the bowels. The rectum was also contracted and thickened, and there was a fistula in and opening on the outside of the anus.

The points of interest in the case which suggest themselves to my mind are:

First—Its appearing at the same time as the inguinal hernia.

Second—The uncommon situation in which it passed out of the abdomen, on the outside of the large vessels and nerves of the thigh.

Third—The great distance to which the bowel had protruded—about thirteen inches.

Fourth—The great length of time the hernia had existed, and life had been sustained with it in that condition.

BUFFALO, 1850.—*Ibid.* WILLIAM RING.

ART. VI.—*Case of Pseudo-membranous laryngitis, (croup,) treated by topical application of the nitrate of silver.* By P. H. STRONG, M. D.

DR. FLINT—*Dear Sir:*

Since you are pleased to regard the following case as of sufficient interest to the profession to merit publication, I do not feel at liberty to decline your request to that end. Herewith you have my notes of the case, mainly as they were jotted down at the time, with little thought of publication.

Wednesday evening, 9½ o'clock, April 10, 1850, I was summoned to see a ch ld of Mrs. M——, North Division street, but resident of Chase county, and just from there. Found her a fair, robust child, of 3½ years, laboring under well marked symptoms of fully developed croup. Pulse rapid, skin burning, slightly livid, respiration frequent, laborious, markedly stridulous, with head thrown back, nostrils compressed, cough characteristically dry and ringing, though perhaps more suffocated and bronchial than in usual form, voice reduced to a whisper. They dated the first of croupal symptoms some five hours anterior to my visit, from exposure to chilling wind—though she had not appeared quite well, I believe, for some days previous. Having neither of my favorite emetics for such cases at hand, (*Blood root* and *Turpeth mineral,*) and the necessity for nausea and emetics being urgent, I gave her ipecac. and tartar emet. for that purpose. After a thorough vomiting she seemed sensibly relieved in respiration, cough, heat of skin, etc. I left her for the night, upon two grs. of calomel every two hours, with a contingent *Turpeth mineral* emetic upon the least aggravation of symptoms. They thought the emetic indicated in the middle of the night, and gave it with evident relief.

Thursday morning, April 11.—At my visit she seemed decidedly better, with croupal symptoms but trifling; continued calomel every four hours, and directed nauseant and expectorant doses of Inf. Sanguinaria statedly, and sufficient of same to vomit upon re-appearance of symptoms, and if she grew worse to summon me at once.

Friday, April 12.—At my stated visit this morning there was a marked aggravation of symptoms, in rapidity of pulse, heat and hue of skin, frequent and stridulous respirations, cough, etc., etc. They now reported her as getting worse through the night, but for some unaccountable reason they had failed to apprise me of it.

As the calomel was loosening the bowels undesirably, and the emetic failed of full relief, I felt anxious to try the topical treatment by strong *Nit. Arg.*

Having had neither experience in, nor observation of the treatment, I hastily consulted several medical gentlemen, who were alike inexperienced. Dr. White, having had the nearest to an experience of any one my time allowed me to see, his advice and assistance were reque ed, and obligingly rendered.

The bent probang, armed with a fine sponge of some ⅜ inch diameter when dry, and saturated in solution of crystals of *Nit. Arg.*, ℈ii to an oz. of water, was applied to the *fauces* and *epiglottis*, and thence passed into the *aperture of the glottis*, without difficulty, and with little

distress to the patient. The sponge, when returned, was somewhat coated with tenacious mucus, and the patient vomited slightly of the same immediately. The effect upon the symptoms were not very marked; the stridulous respiration was, perhaps, slightly lessened. Not being fully satisfied, though encouraged by this trial, we thought it advisable to meet on the case again in 1½ hours, and repeat it if indicated. Accordingly we met again at 11½ A. M., and deeming the topical treatment as the only hope for the little sufferer, and there being, at least, no important results from the former trial, we repeated the application, with more than double the former strength, (℥iv to i℥.) The sponge was now more freely coated with *muco fibrinous* secretion, and more was again ejected by vomiting, with shreds of *albuminous exudation.* The disturbance to the patient by strangling was but slight and momentary, and the relief to the breathing was more palpable than before—though not all we could wish. We concluded to meet again at 3½ o'clock, P. M., and watch the result. At that hour the difficulty in respiration seemed not so referable to the *rima glottidis,* as to lower points in the air passages. The characteristic croupal symptoms might be said to be relieved somewhat, but the energies of the system seemed flagging—it being now some forty-eight hours from the onset of the disease. We viewed the case as less hopeful; but the caustic application suggested to our mind the *only* hope, and a re-application of the same was tried, with but partial relief. Patient continued through the day and succeeding night with no change, except a gradual sinking of vital energies, till Saturday, April 13, 9 o'clock, A. M., at which time her symptoms presented in this wise: Pulse very weak, and so rapid as not to be counted; respiration thrice the normal frequency, suffocative and stridulous, though this apparently was more traceable to the *larynx* or *trachea* than to the *glottis.* Again the caustic application appeared the only hope, and a forlorn one at that. Promising not to lessen its chance, it was again resorted to, with little relief resulting for the time. Indeed, for some five or six hours thereafter, the prognosis seemed so unpromising as almost to forbid persistance in the attempt to administer anything. For that length of time a fatal termination was hourly looked for. I however did persist in recommending a preparation of *sanguinaria* and *lobelia* while she could swallow. She continued apparently failing till night-fall, when she fell asleep, and continued to rest well through the night, her oppressive and stridulous respiration abating hour by hour. Such was their morning report of her.

You, perhaps, Mr. Editor, may imagine, I cannot express, the nature and extent of my surprise, when, at my 9 o'clock morning visit the next day, Sunday 14th, I found my patient neither dead nor dying, as was my expectation, but alive and with a better prospect for continuing so, than she had had since the date of her attack, some three and a half days previous. All her urgent symptoms were effectually mitigated—croupal cough and respiration, cyanosed hue of skin, febrile excitement, etc. She continued to improve from that time forward to complete restoration to health.

In taking a retrospect of the case, while I would not deny qualified

power to the other means resorted to, my conviction was, and is, that the case was hastening to a fatal result, and that not long deferred, till recourse was had to the topical treatment by caustic.

And whilst I would not underrate the inherent recuperative powers of the system, and the *possibility* of an agreeable termination in this case without it, and aware moreover of the evil of deducing too rash conclusions from single cases of results of treatment, still the marked effects that followed the application, as the case presented, suggests it very clearly to my mind as saving the life of my patient. I am happy in this to have the concurring opinion of the counsel in the case.

One or two points seem worthy of particular notice:

1st. The surprising impunity with which so strong (iv. to v. drach. to the ℥,) a solution of nitrate silver (stronger, so far as I know, than Dr. Green or any other advocate of the practice has recommended,) was passed through the rima-glottidis and freely applied to the inner surface of the larynx, and that, too, without appreciable inconvenience to the little patient, except at the moment of obstruction of the passage by the sponge.

2nd. The varying effects of the application at the different stages. When the characteristic respiration and cough were plainly referable to obstruction quite at the opening of the larynx, by the adventitious membrane, the relief was immediate and palpable. Later in the disease, when the obstruction seemed lower in the air passages, the relief was not so evident *at once*, but most gratefully so after the lapse of a few hours. This may be accounted for from the intimate nervous sympathy existing between different points of the same membrane—or, as Dr. Green supposes, from the actual contact of the caustic liquid, as it courses its way down the mucous surface. The sponge being saturated, and thus freely imparting its contents upon touching any point, this last opinion seems not irrational.

This case is the more readily furnished you, Mr. Editor, from the conviction with which the present reporter is possessed, that my professional brethren (here at least,) have hitherto failed to consider (as the undersigned confesses to have done,) the claim that this practice has upon our regard. This may have obtained measurably from the fact that this locality has hitherto been far less obnoxious to that terrific disease, *Croup*, than more easterly localities. However this may be, it now evidently has become of sufficient frequency, and stalks through its course sufficiently defiant of our ordinary means, especially when summoned (as is usually the case, perhaps,) only after the disease is fully formed, as to make it excusable, if not imperative, to consider well a more excellent way—if such is commended to us by facts well attested—the results of actual, cautious experience.

It is said, or of tenthought, "The practice is quite too heroic!" It may be replied, with equal truth, that we have to do with an heroic enemy. And the skillful general is made such, precisely by considering well the position and strength of his foe, and mustering and marshaling his resources accordingly. An advanced stage of a case of croup is eminently a crisis in which, what is well done, must needs be done boldly and quickly. No one can have felt more distrustful of the

recommendation, when broached, of freely introducing a concentrated solution of lunar-caustic directly into the larynx of a child, nor more shrinking and fearful at my first trial of it, than the present writer. Still, I could not shut my eyes, neither methinks can any one, to the array of evidence in its favor; my own being only an isolated case added to a multitude that are recorded.

I may be mistaken in the assumption that it is not practised by my professional brethren in this city. If so, my object in reporting this will be gained by securing, if possible, the report of such cases as may exist. And if not mistaken, my reward will be full, to have commended to the practical consideration, and to have attracted the attention of the profession to what appears an important resource in a real exigency.

I shall not soon forget my anxiety, when my patient was almost at death's door by suffocation, to find some medical friend who could say *he had tried it,* to relieve measurably that trepidation which we are apt to feel at first trial of (to us) untried and bold expedients.

In the hope that the case will fulfil your expectations in subserving the interests of our profession, I subscribe myself,

Yours respectfully, P. H. STRONG.

Buffalo, April 1850.—*Ibid.*

Art. VII.—*On Cholera Asphyxia.* By James F. Gayley, M. D.

In a former number of this Journal (January, 1849,) we discussed the etiology of intermittent and remittent fevers, and the following were our conclusions:

1st. That the lungs and the liver are the great decarbonizing organs of the body; that their function being complementary, the activity of that function is always in an inverse ratio.

2d. That, during winter, the lungs, from the part they perform in the generation of animal heat, are the more active organ. On the other hand, in summer the liver is the more active.

3d. That exposure to a low temperature repels the blood from the surface to the internal organs. If this exposure takes place in winter, the lungs being then the active organ, the brunt of the congestion falls on some part of the respiratory apparatus; hence we have catarrh, bronchitis, pleurisy and pneumonia as the prevailing diseases.

4th. But if this exposure takes place in summer, the liver being then in a state of stimulation, the force of the congestion falls on it. It becomes deranged, involving all those organs, more or less, whose blood has to pass through the liver to reach the heart. Hence we have bilious affections, as intermittents, remittents, dysentery, diarrhœa and cholera, as the prevailing diseases.

5th. That the pulmonary diseases of winter and of cold climates, and the hepatic diseases of summer and of warm climates, are both produced by the same agents acting on the system. The different effects being solely owing to the different modifications of the agents, and the different conditions of the system when exposed to their influence; and

we might with as much truth say, that malaria was the cause of the one as of the other.

The truth of the first proposition is evident from a reference to the function of the lungs and liver in the inferior orders of animals, and in the *fœtus in utero.* In the reptilia, the blood from the inferior extremity and the viscera is decarbonized by the liver, while that from the upper extremity passes through the lungs. In the fœtus, during the period of intra-uterine life, the liver does the whole of the decarbonizing labor, the lungs being inactive until birth.

But this process of decarbonization subserves two other very important purposes. In the lungs it is the source of animal heat; in the liver it forms a fluid very important in the process of digestion. Accordingly, we find the normal temperature of air-breathing animals proportional to the amount of decarbonization performed by the lungs, and it is highest in those in which the whole of the blood passes through this organ, as in the mammalia and birds. The second proposition, therefore, follows immediately from the first, and may be considered a corrollary to it, viz: "that during winter, the lungs, from the part they perform in the generation of animal heat, are the more active organ. On the other hand, the liver is the more active in summer."

The third proposition we will pass over as having no direct bearing on the subject under discussion.

The fourth proposition we believe to be a very important one. It lies at the foundation of a proper understanding of all the diseases peculiar to the tropics, and to the warm season of temperate climates. In the article above alluded to, we endeavored to follow it out in one direction, and to show how, under certain circumstances, it gives rise to intermittent and remittent fevers. Our object in the present article is to follow its workings in another direction, as the cause of cholera.

The blood from the stomach, small and large intestines, has to pass through the liver to reach the heart. The condition of the circulation in the alimentary canal, therefore, depends very much on the condition of the circulation in the liver. We know that in plants, so long as healthy action is going on in the leaves, the fluid taken up by the roots flows onward regularly. But if we arrest this action by shutting out the light and modifying the state of the atmosphere, the circulation ceases, although it is propelled by a constant endosmotic force *a tergo* of from one to three atmospheres. If we let in the light, and restore the normal condition of the atmosphere, the circulation is renewed. So in the portal circulation. While the liver cells perform their functions properly, the blood moves on regularly through the capillaries of the stomach and bowels; and these perform their functions in a healthy manner. But if any of the liver cells become deranged in such a manner that the normal function is not performed, we will have an effect produced in that portion of the portal circulation, which passes through them, similar to what we found in the circulation of the plant, when the function of the leaves was interfered with, viz; an arrest in the onward current. But the cœliac, mesenteric and hemorrhoidal arteries continue to pump in their usual quantity; "the supply is greater than the demand, and we have a glut in the market," viz: congestion. We have

no anastamosing branches here through which this impeded blood can get around the liver, and thus reach the heart. Nature, however, has made provisions in the spleen for remedying this state of things for a time; so long as the spleen is able to accommodate the superfluous blood no bad results follow. But this state of things continuing, the spleen becomes at length filled; the engorgement extends to the splenic vein, thence to its tributary the inferior mesenteric; and from the inferior mesenteric to the vascular rete that lines the colon. Now, we know that whenever an obstruction to the venus circulation exists *a fronte*, an exudation of the serum takes place through the walls of the distended vessels. If we apply a ligature around the arm, so as to impede the circulation towards the heart, all the parts beyond the ligature become œdematous from the exudation of the serum of the blood in the distended vessels into the cellular tissue. In the congested state of the vascular rete of the colon, the exudation takes place into the colon and gives us diarrhœa.

Such is the effect produced by the derangement of a *portion* of the liver cells. But the same agencies that produce an arrest of function of part of the organ may, under certain circumstances, act with such intensity as to arrest the function of the whole. And what will be the consequence? A little reflection will tell us that the stomach, small and large intestines, will in a short time be in a state of extreme congestion. With this we will have increased sensibility (irritability,) and an exosmose of the watery portion of the blood of the congested part into the stomach and bowels. As it passes, it will wash away the epithelial scales of the mucous membrane. The increased sensibility in the stomach produces vomiting; in the bowels, frequent stools; and these stools consist of the washed off epithelial scales mixed with the exuded serum, and present the appearance of rice water. In short, we have *cholera asphyxia*.

The rapid arrest of the function of an organ of such importance as the liver, being the largest gland in the body, and the withdrawal of such a quantity of serum from the circulation, will produce changes in the character of the blood sufficient to account for the other symptoms met with in the disease.

The state of the blood drawn in different stages of the disease, and post-mortem examinations, favor the view here advanced. A circular letter on the former subject was addressed by the Medical Board of the British Army to thirty medical officers stationed in the Madras Presidency. The disease prevailed at most of the military stations, during portions of the years 1819–20–21–22. "It was established by replies to this letter, as well as by an immense amount of concurrent evidence, that the blood of persons affected with cholera is of an unnatural dark color and thick consistence. Those appearances were very uniformly expressed by the terms dark, black, tarry in regard to color; and by thick, ropy, syrupy, semi-coagulated in respect to consistence. The change in the condition of the blood is likewise proved to be in the ratio of the disease; the blood at the commencement seeming to be nearly or altogether natural, and more or less rapidly assuming a morbid state as the disease advanced." (*Johnston on Tropical Climates*, p. 355.) These

are just the results that might be expected from the suspension of the function of the liver, and the consequent copious exudation of serum from the radicals of the vena portarum.

The post-mortem examinations made by the English army surgeons, in the East Indies, give the following results: "In the abdominal cavity, the peritoneal covering of the viscera presents in general but little variation from the healthy standard; occasionally, indeed, the morbid accumulation of blood in the vessels of the viscera, imparting an appearance of turgidity and blueness, is evident even on their exterior surface. We also find them bearing marks of inflammation, especially when the patient may have lingered long before death. In other cases, the whole tube has had a blanched appearance, both internally and externally. . . The liver has been commonly found to be gorged with blood, but not always. . . . *The vessels of the mesentery have been very generally found to be uncommonly full of blood.*" (*Op. cit.* pp. 359, 360.

The Philadelphia College of Physicians appointed Drs. Jackson, Neill, F. H. Smith and Pepper, a committee to make post-mortem examinations of persons having died of cholera during its prevalence here last summer. The following is taken from their report:

"1. In the recent subject, the peritoneal coat, like all the serous membranes, was in all remarkably dry. The lubricating serosity was deficient in the serous membranes.

"2. The epithelial layer of the intestinal mucous membrane was in all the specimens either entirely removed, or was detached, adhering loosely as a pulpy layer mixed with mucus or an albuminoid substance.

"3. *Peyer's glands* were developed to a greater or less extent in all the cases examined.

"The *solitary glands* were also developed, and contained in the recent subject a minute quantity of white substance.

"5. The *villi* were denuded of their covering, but unchanged in other respects.

"6. The *capillaries* were entire, and manifested no departure from their normal state."

In addition to the above, I learn from Dr. Neill, who conducted the investigations, that the proper tissue of the liver was exanguious; but that the large blood-vessels were gorged with blood. This was also the condition of all the large blood-vessels of the abdominal viscera.

The engorgement of the large vessels of the intestines is given in both reports. The report of the English army surgeons is not clear in regard to the state of the liver. We know that the organ is composed of cells, which are the organ proper; the parenchymatous structure, which holds the cells—the little livers—together; and the ramifications of the portal vein, which are only a mechanical arrangement to supply the cells with the fluid out of which to elaborate their proper secretion. In making post-mortems, these distinctions ought to be kept in view. In the report under consideration they were overlooked. Doctor Neill's examinations were conducted with more discrimination. He found the proper structure of the organ exanguious, but the blood-vessels supplying it gorged. The appearance of the capillaries observed by Dr. Neill admits of an easy explanation. We have seen above, the *thickening* of

the blood that takes place during the progress of the disease, and that this change is proportional to the time the disease has existed, and its intensity. Before death, this exists to such a degree as to prevent the blood from entering the capillaries. These, by virtue of the contractility of their walls, keep up a pressure on their contents, causing exudation, and this exudation continues until they gain their normal size. That the blood is too thick to enter the capillaries is evident, from the large vessels being gorged with it. The appearance presented by the serous membranes in those cases examined by Dr. Neill may be accounted for, by the intense congestion arresting the normal vital action of the part, and substituting one purely physical—the exudation into the cavity of the canal in the direction in which the least resistance is offered; and this carries before it the epithelial layer of the mucous membrane, which gave the appearance presented by this membrane in the examinations. Without following out the principle any further in explaining the minutiæ of the appearances presented, we will merely say that slight variations in the appearances presented after death do not militate against the theory here advanced. No agent, even if it acts uniformly, will produce precisely the same effects on all constitutions. But the cause of the disease here advocated (the arrest of the functions of the liver) may exist in various degrees, from that of a few cells to the whole organ. In the details of the appearances presented after death, as well as the symptoms pr sented during life, we might expect a great variety. But there would be certain leading points in which they would all agree, "*Facies non omnibus, una, nec diversa, sed talis decet esse sorores.*" And these points of agreement we have found in the gorged conditions of all the large blood-vessels of the portal system.

The principles of treatment are obvious. The great desideratum is to unlock the secretions of the liver by setting the cells to work. The question is how can this best be done? The experience of the profession proves to us that nothing will do this so well as calomel. This must be our sheet-anchor in this terrible malady. My plan during the past summer was to give it in doses of from ten to twenty grains, at intervals varying from half an hour to two hours, mixed with a little sugar, and laid on the tongue and washed down with a little ice-water. I prefer this way of administering it, because it is rarely if ever thrown off. When given in pill or suspended in syrup, the irritability of the stomach is such that it is apt to be ejected, before the material with which it is mixed can be dissolved by the liquors of the stomach; but when given as above, it almost invariably remains, and acts like a charm in quieting the irritability of the stomach. In connection with this, I used sinapisms to the abdomen and extremities, and frictions with dry flannel, with a view of determining the blood to the surface and thus diminishing the supply to the viscera *a tergo*, while the calomel was creating a demand *a fronte*. This I kept up until the equilibrium of the circulation was restored. In regard to the dose, the quantity given above is only an approximation, as I seldom weighed it. My custom was to carry a vial of calomel always with me, so that when called to a case no time might be lost in sending for it. I poured out what I considered the dose required for the case before me, and administered it as detailed

above. Some may object to what appears to be a wholesale mode of giving calomel; and well they might, if the mucous membrane of the stomach was in normal state. But let it be remembered that it is being loosened and washed away by the constant serous exudation. This, in connection with the fulness of the blood-vessels, will interfere with the process of absorption. It is probable, therefore, that only a portion, and in some cases a very small portion, is absorped. These doses were given only until the violence of the attack was broken. The number required to produce this effect varied from two to five. No bad consequences followed the use of the mercury. In one case slight ptyalism was produced, which yielded readily to the usual treatment.

In some cases the convalescence was rapid. In others, there remained a state of system characterized by considerable thirst, jactitation, debility and occasional watery yellowish stools. This yielded to small doses varying from one-fourth to one grain, three times a day. With several of these I tried an acidulated solution of quinia, but the stomach would not tolerate it. At a later period, however, when the function of the liver was re-established, as indicated by the improved stools and the disappearance of the thirst and jactation, I found quinia to have a very happy effect.

Such was my treatment of the disease during the past summer. Out of thirty-five cases, thirty-two recovered. Some of them were very bad cases. The three that died were beyond the reach of remedies when I was called. There was no pulse at the wrist, and sinapisms had no more effect than if applied to a dead person. In such a state of system, it is to be presumed that internal remedies would be as inert as external applications. This presumption is strengthened when we call to mind the tendency of the disease to destroy the mucous membranes. I never used opiates, camphor, brandy, capsicum, chloroform, or any of the thousand-and-one remedies recommended in this disease. Their multiplicity proves their inefficiency. The spasm and debility I looked upon as the effect of the state of things detailed above, and I considered that the best antispasmodic and the best stimulant which would start the cells of the liver to work. There is much sound philosophy in the aphorism of the father of medicine, "*sanguis solvit spasma.*" If we get rid of the congestion and equalize the circulation, the spasm will disappear.

It affords me pleasure to append the following extract from the second annual report of the medical department of the Siam mission of the Presbyterian church, located at Bangkok, dated October 1st, 1849, and signed by Dr. House, detailing his treatment of cholera during its recent visitation to that city, as it agrees in a remarkable manner with my own. He says:

"With a thousand dying daily on his right hand and on his left, for weeks together, as may be imagined your missionary physician found abundant occupation, though the smitten people, palsied with fear, seemed to deem it useless to contend with death, and, at first, comparatively few bethought themselves of the foreign doctor, or appeared to think his or any art could avail. Nor, indeed, would it, save perhaps to check the complaint in its earliest and forming stage, had not a gracious Prov-

idence been pleased to direct his mind, perplexed and wavering, among the multiplicity of opposite remedies advised, to one single course of treatment for the disease, which soon evinced such results that no other was thought of or required. This course consisted in the administration of *calomel in large doses;* a scruple or even forty grains being given at the outset, followed up at intervals of half an hour or an hour, with other scruple doses of the same remedy till relief was obtained. From one to four were generally required, though as many as seven have been given, and in one case two hundred and sixty grains were taken before the disease was subdued. Of course, unless the disease was unequivocally marked, and admitted of no delay, milder means, such as mixture of laudanum and essence of peppermint, thirty drops each in a wineglassful of water, with external applications, were at first resorted to, and would often prove successful; but these failing to arrest the symptoms, no time was lost in giving the grand remedy.

"Your physician's experience with calomel, given as above stated, and *before the pulse had ceased* at the wrists, inclines him to look upon it almost as a specific for the cure of epidemic cholera. But two cases out of forty-five, to whom it was thus administered, disappointed his hopes; all the rest recovering, though many of them were not severely attacked. Nor did any apparently evil consequences seem to result from the exhibition of these immense doses of calomel, beyond a moderate salivation, and from this even several were exempt." (*Foreign Missions*, Feb., 1850.)

In conclusion, I will take the liberty of saying that my treatment was the *result* of the opinion I had formed of the *cause* of the disease; and this opinion was reached by following out the principle expressed in proposition 4th, quoted at the beginning of this article. It was not a thing of accident, but a conclusion arrived at by philosophical induction.—*Amer. Jour. Med. Sciences.*

Art. VIII.—*Milk Sickness.* By J. J. Lescher, M. D., of Mt. Carmel, Ill.

In endeavoring to identify the poison of *Milk Sickness* wi h Malaria, or, in other words, to argue the correctness of the belief, that the cause of Malarious fevers, and of *Milk Sickness*, or *tires* in the brute, are the same, I will not attempt an elaborate article, but rather present a brief statement of facts which would seem to give countenance to such a theory of the poison in question. To discover the pestiferous agent, has engaged the attention of the wise and the unwise; each one advancing a theory at war with all others. That there should be such discrepancies in opinion, has at all times been a matter of no little astonishment to me; inasmuch as so simple and plausible a solution of the mystery is at hand, and one which seems incontrovertible.

Whilst one class has evinced no little labor and research in ascribing the cause of *tires* to a vegetable origin, contending that the noxious weed had been discovered; another with an equal share of rhetorical skill. has as violently assailed it as preposterous, and instead of a vegetable, believed it a mineral.

A third, not content with either, confidently finds it in water, not knowing whence it derives, or by what name it is to be known. In arriving nearer the truth, as I conceive, however vaguely expressed, a fourth class call it an exhalation from the surface of the earth, the chemical relation of which they cannot define. That *Milk Sickness* is induced in the quadruped by an exposure to an earthly exhalation, and that Malaria is the exhalation, there can scarcely be a doubt, and for the following reasons:

Upon a careful inquiry concerning the location in which the disease under consideration prevails as an epidemic, we invariably find that the same localities engender in man Malarious fevers, proportioned in severity to the brute scourge. We find by reason of the prevalence of disease in man, the presence of Malaria; that the soil is alluvion, being a mixture of animal and vegetable remains. We find furthermore, that the periods most favorable for both classes of disease are identical.

Since we have every reason to believe that the disease in the brute spends its force on the nutritive system and abdominal viscera primarily, as is peculiarly manifested by visceral obstructions, a greatly depraved condition of the secretions, and a very marked derangement of the functions of innervation; and knowing a set of conditions precisely similar, to manifest themselves in the human organism, following an exposure to miasm, should we not seem to approximate something like a just conception of cause and effect, in ascribing to the same pathological conditions a cause one and the same? To forestall the objections of those who would deny or reject my theory of the cause of *tires* on the ground that it is known to occur in places far remote from the vicinity of stagnant pools and marshes, so far indeed as to preclude the possibility of the Malaria having traveled thither, I would say: That in such places wheresoever they be, the soil, from its animal and vegetable composition, nevertheless gives Malaria, though in a degree less than in low and marshy places, and as a necessary consequence, we find ague, which of itself establishes beyond a doubt the true character of the soil and miasm.

To the individual who will exclaim "Ah! but why does not Milk Sickness show itself where ague, bilious fever, &c., do?" The answer may easily be discovered by inquiring into the mode and manner of raising cattle in such places. Instead of being permitted to run at large and endure the hardships of an exposure to the inclemencies of winter, and left to seek for a subsistence in the croppings of shrubs, etc., they are kept under shelter and generously fed, in which situation they remain during winter, until the season of vegetation makes its appearance, when they have health and vigor sufficient to resist the pernicious effects of Malaria, which may be evolved during the succeeding autumn. Whereas, on the other hand, such cattle as are left to themselves, in a state bordering on starvation, become so enfeebled as actually to invite the fury of that which excites the scourge—the miasmatic hydra. The reason of the exemption of horses from the *tires* is undoubtedly attributable to the same cause. Horses are seldom known to have it, and for the very simple reason, that they are rarely left in herds to graze the localities in which cows and other horned cattle are permitted to run. Sheep are exempt from the same cause.

Since no cause more terrible than that of Malaria can be discovered to account for these diseased phenomena, and from its known pernicious qualities with respect to the human organization, is it not more rational to adopt it as the cause which we so long have sought? It is surely more in accordance with the common sense of things, to adopt it, than to seek for and speculate on an unknown cause—an *ignis fatuus*.

Some may perhaps contend that the *Milk Sickness* in the brute is characterised by a greater virulence, than that of Malarious diseases in man as occurring in the same localities. That such is the fact, I am not prepared to deny; but notwithstanding this seeming difficulty, I am not the less inclined to identify the cause. In the one case, by reason of constant exposure, the poison accumulates, and is likewise more highly concentrated, because of the uninterrupted inspiration of the same; and by reason of the peculiarity of its physical conformation, and the manner in which it must search for its food, the quadruped has its nostrils constantly brought in contact with the ground, in consequence of which it inhales the denser and more poisonous part of the miasm. That such an explanation is strictly in accordance with facts is more than probable, from the well known laws which govern Malaria. No one who acknowledges such an agent as miasm doubts that the lower strata of the poison are more noxious than those more elevated—that it cannot ascend to great heights—that the higher it ascends the more innocuous it becomes, until it ceases to be pernicious. And hence, the escape from diseases peculiarly traceable to a Malarious origin, of the majority of those individuals who sleep in upper stories, and of those whose houses are built upon an artificial or natural ground, as tending to modify the virulence of the deleterious agent. If these laws are well established, taking it for granted that the same agent is the exciting cause of the *tires* in the brute, the difference in point of severity of the two diseases can be very easily reconciled. For instance, expose two individuals of similar habits to the same cause, differing only in degree, and the consequence will be that in the case of the one exposed to the lesser degree, he will be subjected to a disease precisely the same in character with the other, differing alone in severity. The same mode of reasoning with reference to the human and brute creatures, must lead to the same conclusions, modified to be sure by the difference of organization.

If my etiology of *tires* be correct, and as such generally acknowledged by that portion of the profession whose habitation affords them the opportunity of witnessing and treating *Milk Sickness*, as it shows itself in the human species, methinks very important and useful deductions could be drawn, tending to a more rational, and eminently a more speedy and successful treatment. Instead of clothing it with gorgon terror and inexplicable mystery, instead of regarding the disease under consideration as induced by eating *poisoned* meat, and drinking *poisoned* milk, it were merely regarded as the consequence of *diseased* ingesta, the treatment would be vastly simplified, and a long train of suffering, both mental and physical, would be spared the despairing sufferer. I italicise the word poisoned, because, when used in this connection, the

mass imply by it something specifically alarming and terrible. Why not regard the diseased flesh and milk, as the flesh and milk of an animal dying of *brute ague*, as, indeed, the vulgar name of *trembles*, which is but another appellation by which the *tires* is known, pathognomically expressed, meaning that it stands for a disease characterized by rigors.

The deleterious effects of diseased meats on the human system are well known. Witness, for instance, the history of those suffering under the disease which in Germany is known as *Milzbrand*, which, judging from the literal meaning of the term *milz*, spleen, and *brand*, gangrene, I am very much inclined to regard as synonymous with *trembles*. When the flesh of over driven oxen excites disease of the first passages in those eating it, the assertion of Prof. Dunglison to the contrary notwithstanding, an instance in proof of which I will relate, it need not be a matter of surprise. But when the flesh of diseased cattle, and of over driven cattle, excite symptoms very like each other, it should at least teach us caution in ascribing undue qualities to the flesh of *milk-sick* cattle.

A number of years past, whilst attending a course of lectures in the Medical College of Ohio, Prof. Mussey related the following: During a hot and sultry autumnal day, a large and healthy drove of fat oxen were for some cause or other over driven, in reaching the Boston market; soon after which some were slaughtered, and the flesh disposed of. Many who had eaten of the meat, he observed, were seized with nausea, succeeded with violent pain in the stomach and bowels, incessant vomiting, &c. Although, at first, the bowels were frequently evacuated, they subsequently became obstinately constipated. An instance similar to the above I remember to have seen in newspapers a few years ago. Let us for a moment trace the disturbances in the system, following the use of the flesh of an ox which we have every reason to believe diseased preceding slaughter. Sooner or later it excites a disordered condition of the stomach and bowels, known by the name of irritation of the gastro-enteric mucous lining membrane, which, if not speedily removed, excites, through sympathy, the nerves of nutrition, and is soon succeeded by deranged function of the glandular system, causing the secretory organs to throw into the alimentary tube irritating and depraved fluids, and finally terminating in inflamation of a low grade during the entire course of such diseased action, it may very properly be compared with *Milk Sickness*. To establish farther the identity of the cause of *tires* with Malaria, we need but inquire into the means which are known to be effectual in destroying the cause. Cultivate the ground, and *Milk Sickness* disappears. The same holds good with respect to Malaria, although not to such a degree as to prevent its formation totally. Prof. Drake, than whom we have not a sounder or more practical mind in the West, on the subject of Western Medical Topography, says cultivation is the most infallible of all other means.

In the early settlement of Green Co., Ohio, the *trembles* was so annoying and of such frequent occurrence as very much to interfere with its settlement, which for a time remained at a stand-still, whilst neighboring counties not obnoxious to the scourge, rapidly filled up. However,

as the lands were drained and cultivated, the disease disappeared, and at this time is perhaps wholly unknown to its citizens, except by name. In the same place, malarious fevers are by no means frequent.

Of the good effect of cultivation and draining, many incidents might be related; but let the experience of shrewd and observant farmers suffice. If asked how best they may protect their cattle, their answer is: "fence the infectious ground clear, and sow it in grass." Will not the same process diminish malaria? Is not malaria the noxious enemy against which the farmer directs his energies? Like the Apollo of heathen mythology, does he not stay the breath of the Python by destroying the monster? To return to a consideration of the different opinions concerning the cause of "brute ague." To detect the cause in any of the species of *rhus*, is so utterly groundless, as scarce deserving any thing more than a mere denial.

That it resides in any mineral, is equally as untenable; inasmuch as the means effectual in dissipating the cause, cannot reach the mineral.

That it must be malaria, is further confirmed by the fact, that wild turkeys contract the disease, which could scarcely be possible unless it be through the medium of their organs of respiration—unless, as some contend, they eat the diseased flesh.

In view of all the foregoing facts, if malaria be so subtle an agent, as to excite some of the most formidable diseases to be found in the calendar of human ills, where is the propriety of discarding it when searching for a thing known to possess properties alike with it? Or rather, wherein consists the impropriety of ascribing to it, powers capable of inducing functional and organic derangements in the brute creation, as it is known to effect in the human? There is no need of casting aside a known cause, to seek a bug-bear or a phantom.

Therefore, if malaria be the cause, we need no longer combat with a foe unshapen and unknown; but on the contrary give it "a local habitation and a name." The reproach of a baffled art would cease to rear its sneering front. But so long as there continues to be such a contrariety of opinions as to the etiology and pathology — so long as we seek for, and are confidently taught the presence of a *specific* poison in the fluids and solids of the brutes, imparting its specific qualities to the organism of the human being, engendering poisonous properties in the circulating mass, instead of regarding the fluids as deteriorated by reason of the irritation primarily excited and established in the first passages, so long may we deplore the want of a rational therapeutical management of the suffering — so long must we endure the taunts and jeers of the ignorant and petulant.

Upon the whole, undue importance seems to be attached to the disease. Prof. Drake says: "in the districts where the disease is endemic, it does not destroy as many as pleurisy or cholera morbus." From the crude notions of its pathology, its frequency is wildly exaggerated, confounded as it frequently is with Bilious Vomit, Gastritis, and intestinal derangement produced by ordinary causes. And because such diseases are so often aggravated by an empiric course of stimulation and acrid purgation, under the impression that the disease under treatment is *Milk-Sickness*, lives are sacrificed, and the court of the insatiable *milk-sick* minister of death is thronged with the ghosts of the unfortunate victims.

Milk-Sickness is generally regarded as an alarming disease, and as one demanding more than ordinary medication; the mass believing that the gift of curing it, is one akin to the supernatural, not to be acquired through the common media of medical instruction; and hence the propensity of ignorant and unprincipled medicasters to report simple gastric derangements as *Milk-Sickness;* the consequence being, that their fame reaps *milken* as well as *golden* laurels.

This lip-mocking class of trumpeters know, very well, the marvelousness of the mass, and the strange fondness which this same credulity begets for the mysterious, in the matter of disease and medicine. They know, likewise, the proneness of testing a physician's skill by a numerical method; that is, the one who loses the greater number of patients laboring under a *reputed* disease, however much skill he may have displayed, must bear the reproachful and *ungrateful* epithet of an unsuccessful *doctor*. The palm of victory and triumph is awarded to the *pseudo-medicus*. The modest man of science, who treats *diseases*, must have his prized reputation tarnished and trodden under foot, whilst his rival, whom he does not condescend to regard as such, who treats *names*, changed to suit the popular breeze, is heralded as a prodigy in his profession. There is a strange disposition, in the great majority of men, to hanker after that which is not in the ordinary course of things. The every-day occurrences of life, move them not, but let something appear, which to them is incomprehensible, then all is wonder and amazement.

So it is in the practice of medicine. Simple and *truthful* names for diseases, as they ordinarily occur, excite no astonishment, unless it be a feeling akin to disappointment, because of the simplicity of the name of the disease. But bring forth the charlatan "Congestive Chills!" of "Winter Fever!" of "Milk-Sickness!" of "Fuss and Feath-ers," and witness the effect!—a whole community stands agog. The excitement whets the appetite of the panic-stirring *doctor;* as the season changes, so does his epidemic, always artful enough to take his cure from his superior, whose honest reputation he covets.—*North-Western Journal.*

Art. IX.—*Remarks upon Malignant Dysentery, or "Bloody Flux," with cases illustrative of the Pathology, and treatment of the Disease.* By Robert J. Draughon, M. D., of Claiborne, Alabama.

This disease consists in an inflammation, terminating in ulceration, of the mucous follicles of the large intestine, and particularly of the rectum. Under all circumstances, it is found to be more or less intractible; but when complicated with gastro-enteritis, and derangements of the chylopoietic viscera, peculiarly so. These complications some practitioners have failed to detect, and hence the name applied to it, in such cases of *bilious* dysentery, or "flux." Such an application of an unmerited term, has led heretofore, and will continue to lead, to very erroneous deductions in practice. Calomel has been exhibited in large doses; and from time to time, until the liver has been incited to the normal discharge of function, and then again perverted in its action by its use; and still the disease has persisted in the lower bowel. That

torpor of this organ usually attends an attack of flux, the writer is willing to admit; but that it is the cause of the affection he is fully prepared to deny. It will be seen, presently, that very opposite modes of treatment are required for the cure of the two forms, and a nice discrimination is to be observed, lest injury be done to the patient.

Simple irritative dysentery, known by a præternatural laxity of the bowels accompanied with a little frothy mucus sometimes streaked with blood, and attended with more or less tormina and tenesmus, may occur sporadically, at any season of the year, or regularly every year upon the opening of spring, or about the close of warm weather in the fall; but malignant dysentery or bloody flux prevails exclusively as an epidemic, or is propagated by contagion, and is but little dependant upon the season of the year, or upon the climate. That cool and damp spells of weather, succeeding hot and sultry ones, often give rise to it, in sections of country not previously visited by it, may not be denied; but that such has been the case, when it was not prevailing in districts contiguous, has not been observed. When so prevailing, as with other epidemics, there is a manifest disposition on the part of other diseases to take on its peculiar garb and hence the variety of fluxes from and irritations of the bowels attending the ordinary fevers and pneumonias of the country, so annoying to the practitioner, and distressing, if not hazardous, to the sick.

The *symptoms* of flux are—a frequent irresistible desire to evacuate the bowels, and sometimes without the corresponding ability, accompanied with violent pains and cramps in the abdomen, which immediately precede every discharge, and in consequence of the severity of which, the patient cries aloud, and rolls upon the bed, in a paroxysm of agony. The dejections are, at first, composed of the natural fœcal matter, broken down and reduced to a liquid form, but ultimately assume a sanguineous, or muco-sanguineous character, and are voided very frequently, but in small quantities. In some instances, pure blood alone is discharged, but for the most part it is mixed with mucous, cheesy matter, albumen, or lymph, occasionally hardened lumps of fœcal matter are expelled from the bowel, giving ease and comfort to the patient. These are denominated scybalæ, and their expulsion permits the bowel to contract, without embracing painfully, a solid substance within its folds. The writer is in the habit of comparing the dejections in flux to the common tree moss, dipped in blood, and cast into a chamber glass. Others compare them, and with much correctness, to the "washings of meat," in which the separated fibres, fat and blood, are intimately blended. The disease is commonly preceded, for some days, by a general feeling of *malaise*, loss of appetite, with an unpleasant taste in the mouth, nausea, and wandering pains in the bowels, while more or less of constipation attends, and is usually, though not always, ushered in by a chill, of slight severity, followed by reaction more or less intense, as evinced by an increased warmth of the skin, and frequent pulse. It is not uncommon, however, for the surface to remain cool, and the pulse quiet, while the sufferer is constantly harassed with pain and bloody dejections.* The tongue is loaded with a white fur, in the centre,

*This is frequently the case when the disease is confined to the rectum.

while the edges have a livid hue, or is perfectly clean, and of a dingy red color, looking as if stained with red ochre; this last appearance may with certainty, be relied on as a *diagnostic* symptom of the disease. In the latter stages the organ becomes, in a large number of cases, dry and pointed, indicative of a high degree of inflammation, with ulceration—the same as observed in typhus fever. Sometimes an ulcer may be detected on the tongue, and is a very disagreeable symptom, betraying an extensive spread of the ulcerative process. There is restlessness, and sometimes, though not often, delirium. The tone of the stomach is often weakened, especially in cases complicated with gastritis; and in such circumstances blood is not unfrequently thrown up with the secretions of the organ, variously changed. In cases complicated with enteritis, or with a vitiated state of the biliary secretion — the conditions obtaining in autumnal fever — the discharges are of a sanguineo-green, or indigo color, with now and then a lump of grumous blood, and putrid matter.* The tongue, in these instances, is usually very red, and very dry, and the pulse is small, frequent, and quick, but not always corded, while the thirst is insatiable, and the skin is either preternaturally cool, or hot and dry.† The disease thus complicated proceeds rapidly to a fatal termination, if not arrested, and must be treated with much care.

It is unnecessary, after thus detailing the symptoms of flux, to speak of the *diagnosis*. This is arrived at with so much ease and certainty, that it is impossible to be misled in its formation.

Of the *Prognosis* it is also required to say but little. In proportion to the extent of the inflammation and subsequent ulceration, must be estimated the danger of the patient. Complications, as observed, are always unhappy. The appearance of *pus*, or purulent matter of a light yellow color in the discharges is always a harbinger of good, showing that the ulcerated surfaces have assumed a healthy tone, and are making an effort to heal by *granulation* and *cicatrization*. Sickness of stomach and extreme jactitation are unfavorable. The discharge of fœcal matter after the disease has progressed for several days, betokens a coming improvement, as also a warm, moist skin, full, soft pulse, and relaxation of the tongue.

In regard to the *treatment* of flux, no fixed rule may be laid down, unless it be to purge, but always with the milder articles, as Castor or Olive Oil, Rhubarb and Magnesia, Sulphur, Manna, etc., until the tract of the bowel is thoroughly cleansed.‡ The symptoms are exceedingly variable, and such treatment must be adopted as seems to suit best each particular case. If the pulse be frequent, jerking and corded, although not very voluminous, and the skin hot and dry, the abstraction of blood will be attended with benefit; after which a mild but brisk

* This green discharge, the writer found, upon close inspection, to be composed, as in fever, of particles of an adventitious membrane, thrown out from the congested vessels of the intestine, upon the mucous coat, to which it adhered.

† In these cases the patient complains of no pain, but is exceedingly restless.

‡ The use of purgatives should be persisted in until the alvine matter appears in the evacuations.

purgative should be given every four or five hours, until the bowels are thoroughly evacuated. With this view, the following may be taken, in the dose of a table spoonful every three or four hours, until a free action on the bowels is obtained:

℞.—Ol. Ricini ℥jii:
Sat. Sol. Gum Arabic ℥jii.
Sach. Alb. ℥ss. M.

This impression on the bowel must be maintained for some time, in moderate degree, with a view to carry off the vitiated secretions constantly accumulating, and to keep the ulcerated surfaces cleansed. For this purpose the same mixture may be exhibited, but with the addition of—

℞.—Ol. Terebinthinæ ℥jii.
Tinct. Opii ℥ji. M.

The turpentine and laudanum are added with a view to overcome spasm, allay irritation, and promote the healing of the ulcers. It is needless to advert, in support of this treatment, to the powers and virtues of turpentine, as an application to ulcers and particularly to those of a phagedænic character. Every surgeon regards it as opposed, both in its local and constitutional action, to the extension of the ulcerative process, and uses it with the happiest results to promote the restoration of the loss of substance, by granulation. Its alterative tendency is deservedly held in high regard — instituting a train of movements in the system which is eminently calculated to subvert the morbid processes which may be in progress in any part of the organism. Turpentine will arouse the susceptibilities and dormant energies of the system, when no other article can be found sufficiently exciting; and herein lies its strongest recommendation — its power and tendency to associate constitutional and local action.

The rectum, in its sympathetic relations, it is well known, is less endowed than any other organ of the same size and importance, in point of function. This is exemplified not only anatomically, by its position at the very extremity of the vast intestinal tube, but by the little influence, generally, of its diseases upon the system at large, as in rectitis, both acute and chronic; hemorrhoids, and the existence of foreign bodies in this organ, etc.* In flux, in many cases, this part of the bowel is alone embraced, and almost suffers disorganization ere the system manifests any degree of sympathy in its sufferings, as is evidenced by the quiet pulse, the natural temperature of the skin, and the calm and regular play of organs. Turpentine in these instances, is a favorite article with the writer, and he has never failed to effect the object had in view by its use. To explain, satisfactorily, its *modus operandi*, he does not pretend, but it does appear to increase the vital resistance and energy of the organ. Be this as it may, however, enough is it for him to know, that the above-mentioned important object has been repeatedly accom-

* Through the medium of the sympathies the general system comes with its recuperative energies to the aid of a part, and, by sharing its troubles, saves it from destruction.

plished by it in his hands. Another important property possessed by the spts. turpentine, and by reason of which it seems peculiarly applicable to the cure of dysentery, it may not be improper to mention. It is that of a diuretic. Eminently directed to the mucous membranes generally, it seems especially to act upon the kidneys and urinary bladder. On the principle of a counter irritant, therefore, it may be employed with singular advantage, as a diuretic. The writer has, invariably seen all of the symptoms of confirmed flux subside upon the occurrence of a strangury; indeed, to such an extent does he rely upon this condition, that he has been induced to use it repeatedly with the view to produce it. Analogically reasoning, moreover, it seems peculiarly applicable from the signal success attending its exhibition in similar diseases of the mucous membranes as in the latter stages of obstinate diarrhœa, cholera infantum, typhus fever, etc.; it is opposed, moreover, to that peculiar and indeed properly named *specific* inflammation, terminating in ulceration, as well as to the extension of the latter condition, which may only exist in a weakened part; besides it is a valuable antiseptic, increasing the tone of the tissue verging upon gangrene, and thereby preventing the occurrence of mortification. Nor is the oil of turpentine less opposed to congestion, which not unfrequently obtains as a complication in flux, in consequence of some predisposing condition of the atmosphere. Turpentine, then; is a remedy deservedly held in high repute in flux; but, unrivaled as are its powers, and unprecedented as has been the success attending its employment, it must, as with all other active remedial agents, be used with caution and discrimination. In those cases complicated with gastritis or enteritis, in which inflammation of an *active* character presents as a prime element, the propriety of its exhibition must not for one moment be entertained. Highly inflammatory in its nature, it will invariably enhance the urgency of every symptom, and hurry on the patient to an already threatening grave. Here mercury, and mercury alone, may be fully relied upon. But it must be cautiously managed. The bowels should be emptied in the commencement of the treatment, by some mild purgative, and then some one of the mercurial preparations, calomel preferably, should be given, in moderate quantities, and at regular intervals, so that it shall gradually accumulate in the bowels until enough of it has been taken to effect the end desired. Should it evince a tendency to hypercatharsis, opium must be combined in such quantity as is necessary, let it be what it may; and if, under the action of the compound, the tongue becomes fiery red, and *dry*, and the restlessness and thirst of the patient increase, some one of the *preparations of antimony* must be added, in small quantity, to each dose.* The influence of mercury is sometimes poisonous in inflamma-

*To administer the preparations of antimony in dysentery, where the tongue is "fiery red and dry," not only conflicts with the well ascertained principles of pathology, but also militates against the positive experience of every observant physician. If, by the "preparations of antimony," our author means emetic tartar, the practice recommended is unquestionably hazardous and should be condemned. If the influence of mercury be poisonous in such cases, surely it would require no additional stretch of the imagination, to include the preparations of antimony in the same category! We know that a "red and dry tongue," in certain forms of dysentery and typhoid fever, may be made to assume its normal appear.

tions of the stomach and bowels, and particularly when combined with opium, stimulating and constringing the capillaries, instead of relaxing them, thus effectually depriving them of the power of absorption, and the eliminating-secreting vessels of the privilege of relieving themselves of engorgement by secretion. Under such circumstances, the due admixture of antimony will be attended with the happiest results. The tongue will fade, and become relaxed and moist under its use, and the inordinate heat of skin, thirst, and restlessness will subside: these, with a softened pulse, affording to the practitioner the happy assurance that the evil tendency of the mercury and opium has been corrected; the capillary system is relaxed, and, in the event of a bluish tinge being imparted to the tongue, the system is then brought under a salutary mercurial impression. The following formula has been used by the writer with the above-mentioned pleasing results:

Hyd. Chloridum Mite. 4 grs.
Opium, 1-8 gr.
Pulv. Antimonialis 1-2—1 gr.
To be taken every four hours.

With this should be applied contemperaneously a poultice of flaxseed or slippery elm, to the stomach and bowels; or if venesection has been premised, a blister of Spanish flies. Should the bowels become iritable, or have been so at first, the following may be substituted:

Pil. Hydrarg. Mass. 32 grs.
Sat. Sol. Gum Arabic, ℥viii.
Camph. Tinct. Opii. ℥jiii.
Tablespoonful every four hours.

If, after the inflammation of the stomach and small intestines has been reduced, the ulceration is still progressing in the colon and rectum, the following will generally succeed:

Vinum Ipecacuanhæ 4 oz.
Aqua Camphoræ 4 oz.
Camph. Tinct. Opii 8 drachms.
A tablespoonful every four hours.

Or the following:

Pul. Doveri 8 grs.
Sage Tea, q s.
Three times per day.

Should none of the foregoing prescriptions succeed in checking the disease, it will be necessary to resort to the use of turpentine enemata, of which the following may be received as a formula:

Spts. Terebinth. Gutt. xxx.
Tinct. Opii Gutt. xv. (vel.) xx.
Melted Fresh Butter, 16 oz. M.
Repeated three or four times per day.

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ance, under the influence of stimulants; such as camphor, carbonate of ammonia, serpentaria or even wine-whey and brandy; but neither our knowledge of pathology, nor the observation of several years practice, has convinced us that tartar emetic or other preparations of antimony, can ever act otherwise than injuriously upon the stomach and bowels in the cases indicated by our author.—Ed.

Nothing can be more soothing than injections of fresh butter; and they are highly proper in every stage and form of the disease, with or without laudanum, as the circumstances of the case may demand. Should they not succeed in allaying the extreme irritability of the bowels, however, a suppos tory of opium may be substituted. Blisters are beneficial, both in the simple and complicated forms of the disease, but must be employed under proper circumstances, or they will aggravate the symptoms and increase the sufferings of the patient. Equally in point of correctness, will the remark apply to blisters, as to mercury and opium; that in cases of violent reaction, venesection should invariably precede them. The constitutional effect of the lytta, is that of a powerful stimulus, expending its influence mostly upon the heart and circulating vessels, and upon the secreting surfaces and organs, but not a little affecting the nervous matter, exalting every sympathy, and exciting painfully the motor energies. Prudence then would suggest their use only in cases in which their stimulating impression may be tolerated by the system. Blisters affect mainly after the heart and larger arteries, the capillary system of vessels, and their effect is to stimulate and constringe them, as is shown conclusively by the jirking pulse, and heightened temperature whenever they begin "to draw." It might be demonstrated, did the limits of the present treatise admit of it, that these vessels are principally concerned in the inflamatory process. We have these four remedies in flux of acknowledged utility, but all requiring the exercise of discretion on the part of the practitioner, viz: —*turpentine, mercury, opium* and *vesicatories*,—and in cases marked by strong reaction, *venesection*. The first should be discontinued as soon as the discharges assume a healthy appearance, as of thick yellow mucus or pus; or when the bloody discharges have ceased and a thin albuminous looking mucoid secretion only continues. The second must be discontinued as soon as the symptoms requiring its employment subside, or the system is brought under its constitutional action. The third may be continued as long as there is pain and other evidence of irritation—not unfrequently it is the only article required in the latter stages, when the bowels are thoroughly cleansed, and the discharges present that gleety appearance just mentioned above. Under these circumstances the bowels only require rest to insure their restoration to health, and discharge of function. Vesication should only be resorted to under the restrictions alluded to above, and where there is a probability that the superficial inflammation, created by the use of blisters, shall be more extensive and of higher grade than that existing within, and should be discontinued as soon as possible, as they disturb that repose so necessary to the restoration of health, in affections of the bowels. Some practitioners, after blistering the abdomen, when the whole arch of the colon and the entire tract of the rectum are inflamed and ulcerated, and being disappointed in their expectations, have unhesitatingly denounced the measure as not only of no value but as positively injurious in flux. If the writer has derived benefit from any application in flux, it has been from blisters. *Venesection* of course will not be resorted to, except in cases really requiring the lancet, and should then be used early in the

disease. In conclusion, it is proper to remark, that medicine should be laid aside as soon as possible, in the treatment of malignant dysentery or flux.

The *convalescence* from this disease is slow and tedious. During an attack, many inroads are made upon the constitution and strength of the patient, and great feebleness attends his "getting up." The exercise should be moderate, and short of fatigue; the food light and digestible. The bowels are often left in a debilitated condition, and the least degree of excitement of body or mind is liable to bring on a cholera morbus or colliquative diarrhœa, or else a return of the original disease. In order more effectually to guard against a relapse, and to insure a restoration of the tone of the bowels as well as to the system in general, a *good* article of Port wine may be used several times during the day, in moderate quantity and at first diluted with water; or, if this is not to be had, good Madeira wine considerably diluted and sweetened with sugar, to which may be added nutmeg. On the slightest appearance of a return of the irritation of the bowels, an opiate should be exhibited and perfect quietude enjoined upon the patient. In those cases that assume a chronic form and threaten to run on to an indefinite length of time, the oil of turpentine should be used three times daily, in small quantity dropped on sugar and taken just before meals.

The following are some of the more prominent cases of dysentery occurring in the practice of the writer in the summer and fall of 1849:

Case 1st.—R. P——, æt. 8 years, of delicate constitution, light hair, thin skin and blue eyes, was seized on the 27th August with a slight chill, followed by fever, vomiting and purging, with several pains and cramps in the bowels and considerable thirst and general uneasiness. I was sent for in the evening, but owing to circumstances did not see him until the next morning, 10 o'clock. Sent him, however, the following preparation:

Mercury with chalk, 24 grains,
Dovers' Powders, 16 "

Divided into eight powders; one to be taken every three hours.

August 28th, 10 o'clock, P. M. Patient more comfortable but not essentially better. Had considerable fever and thirst; tongue foul and apparently swollen; nausea and jactitation; pulse frequent and quick, but compressible. Discharges sanguinolent and frequent, but voided in small quantity, and owing to the opium perhaps, attended with less pain. Medicine had not acted, so far as we could learn from the nurse, and an inspection of the last discharge. Prescribed 4 grains calomel combined with 1-8 grain of opium, to be repeated every four hours with blister to epigastrium reaching down to the umbilicus.

August 29th, 8 o'clock, A. M. Found patient but little better; had an unpleasant night. Under the influence of the opium he slept soundly. Fever slightly moderated this morning. Thirst less but still troublesome. Nausea and jactitation. Pain in abdomen not so great. Tongue but little changed; medicine had operated twice; discharges of a greenish and muddy color, mixed with sanguinolent and cheesy matter,

and very offensive; pulse frequent, small and quick, but still compressible; blister had drawn well; directed blister to be dressed with a warm and emollient poultice and continued. Prescription of yesterday, with mucilaginous drinks.

August 30, 8 o'clock, A. M. Patient comparatively comfortable; had some pains, however, immediately preceding every evacuation of the bowels. They were this morning more copious and bloody with a quanty of mucus and lymph. Had a number of consistent bilious dejectious nearly free from blood and other matter during the night. Tongue relaxed, less swollen and of a slighly bluish color. Thirst greatly diminished. Pulse softer, more equable and slower. Surface cool and perspirable. Blister running well; concluding that the inflammation of the stomach and small intestines was greatly reduced and that by quieting the bowels for twelve hours the improvement would continue, I directed the blister to be dressed with cabbage leaves and an anodyne occasionally during the day.

August 31, 8 o'clock, P. M. Patient apparently a great deal better. Countenance calm and happy in expression. Pulse natural, with exception of a little fulness. Surface pleasantly warm and perspirable; tongue cleaning, but the clean surface of a deep red color and the sanguineous discharges were very frequent and copious but unattended with much pain. Intending to stay with my patient to-night and desirous of avoiding the further exhibition of potent medicine at least so long as I could be with him, gave him on my arrival a full dose of paregoric. This put him to sleep and checked the action of the bowel until about midnight, when I was aroused and requested to see him as he was constantly up and seemed much exhausted after the last operation. I found him lying quite calm and disposed to sleep, which I attributed to fatigue. Surface cool on the body and face and cold on the extremities. Pulse week but sufficiently full. Gave him another dose of paregoric, directed warm applications to extremities and lay down again.

August 31. Patient better than when I examined him last. Surface warm. Countenance placid and pulse nearly or quite natural. Slept until sunrise. Bowels still quiet. Concluded to wait till ten o'clock and watch its progress. Before the hour of departure had arrived, he again become restless with pain in the region of the sigmoid flexure of the colon, extending down the rectum and had several copious evacuations in rapid succession. These looked like moss dipped in *fluid* blood and cast into the "chamber." Upon examining his tongue, found it still cleaning but of a deep red color. Directing a large dessert spoonful of the following mixture every four hours:

℞.—Spirits turpentine, ʒji.,
Tinct opii, xx. gutt.
Olive oil, ʒvi. mix.

Sept. 1st,—Patient very unwell. Restless, thirsty and feverish; surface dry and harsh; tongue dry and red except in the centre, which was brown. Discharges, however, were of a lighter color and thinner, having very much the appearance of evacuations produced by the drastic

purgatives in which shreds of lymph, mucus, blood and serum were mixed. These induced me to persevere in the use of the mixture, notwithstanding its otherwise unpleasant effect. Directed in conjunction with its use, the application of emollient poultices to abdomen, and the liberal use of demulcent drinks.

Sept. 2d.—Morning.—Patient more composed; thirst less; pulse less jerking but still quite frequent; surface soft and slightly moist; tongue less red and moist in the center but dry at the tip, still cleaning slowly, but cleaned surface unnaturally red. Dejections less copious but in other respects the same as this morning; last night about 12 o'clock had quite a number that were large and contained a large quantity of bilious and fœcal matter. Since then patient rested well, and attendant had not given the medicine. Directed a tablespoonful of the following mixture to be taken three times during the day and enemata with the addition of a few drops of oil of turpentine and laudanum to be used as last night:

℞.—Castor Oil, Gum Arabic, a. a. ℥ji.
Oil of Turpentine, ℥ji.
Tinct. Opium, gutt. xxxii.

Sept. 3d.—Morning.—Patient slowly improving; more alvine matter discharged last evening; discharges of light color and reduced in quantity; treatment continued.

Sept. 4th.—Morning.—Patient "on the mend;" discharges having a muco-purulent appearance of a light yellow color and containing but little blood; treatment continued.

Sept. 5th.—Did not see my patient to-day.

Sept. 6th.—Patient somewhat restless, thirsty and feverish. Harsh dry skin, &c. This I attributed to the mercury taken at the outset as his gums were slightly swollen and had a number of bilious discharges in my absence. He was, also, suffering from a slight strangury. His tongue was again dry and of a dark color in the centre. Directed use of mixture to be discontinued. Poultice to bowels; emollient enemata and demulcent drinks.

Sept. 7th.—Patient very much improved. Strangury has passed off and all unpleasant symptoms have subsided. Body of tongue now clean and relaxed. Discharges less frequent, small and of a light yellow color, having the appearance of mucus stained with yellow bile. Directed the occasional use of paregoric to keep the bowels quiet and a little Port wine occasionally. Discharged.

Remarks.—This was a case of flux complicated with gastro-enteritis. The latter could only be dealt with by mercury; the former with oil and turpentine. The evil effects attributed to the turpentine were due to a latent mercurial impression which protracted the cure and increased the danger of the patient inasmuch as it prevented the turpentine from having its usual happy effect in such cases, and by constricting the surface, converted it into a capillary stimulant alone, instead of a diaphoretic stimulant; continued purging seems to have expedited the cure which was consummated upon the occurrence of strangury.

Case 2d.—W. P., æt. 26, of phlegmatic temperament and delicate constitution, was seized on the 10th September, with the usual symptoms of flux, viz: Pain in the abdomen, nausea and purging with some fever and considerable jactitation; tongue loaded in the centre with a white fur with tip and edges of a dark red color. Had been complaining for several days of wandering pains in the bowels and a feeling of uneasiness and debility. Upon examination found that the disease embraced the whole of the colon and rectum and that the stomach was sympathetically affected. The dejections were sanguinolent, in every respect like those in the preceding case. Prescribed 10 grains calomel and 1 grain opium in pill, and applied a hot poultice to bowels with mucilaginous drinks.

Sept. 13th.—Patient easier but disease continued unabated; the quantity of blood had increased in the discharge. Soreness upon pressure throughout the entire length of colon and rectum; some nausea at times; medicine had not acted. Prescribed 10 grains calomel with 1 grain of opium. Blister to abdomen and demulcent drinks.

14th.—Morning.—Patient said he felt better and was disposed to sleep. Medicine had acted well, bringing away a large quantity of dark bilious matters, but as soon as these had ceased the sanguinolent discharges returned. The pain, however, immediately preceding them was less severe and seated lower down. Blister had drawn; gums "were touched." Prescribed the turpentine mixture; directed blister to be dressed with a poultice and free use of demulcent drinks.

15th.—Patient felt "pretty well;" no fever; tongue moist but unchanged; discharges contained an increased quantity of serum and some alvine matter but were still frequent and bloody; continued treatment of yesterday with turpentine enemata.

16th.—Patient improving; no fever; quite composed; tongue unchanged; pain less and discharges considerably lighter and somewhat purulent in appearance. Patient was now suffering from a slight strangury. Discontinued the use of the turpentine, and directed emollient anodyne enemata and use of demulcent drinks as before. Discharged.

Case 3d.—L. T., æt. 12; sanguine bilious temperament and robust constitution, was attacked on the 13th of September, with the usual symptoms of "flux," implicating the chylopoietic viscera. The element forming the complication being congestion of a rather passive character; applied mustard and hot poultices to overcome the congestion, and gave three powders during the day, composed of mercury with chalk and Dovers' powder.

14th.—Patient better; medicine had acted well. Congestion was removed but the sanguinolent discharges continued; tongue still heavily loaded in the center but cleaning at the tip; tip and edges of a dark red, approaching to a livid color. Prescribed the turpentine mixture with turpentine enemata and mucilaginous drinks.

15th.—Patient improving; surface cool and perspirable; tongue increased in redness but cleaning; discharges assuming a healthful appearance; complains a little of pain and heat in urinating; discontinued the medicine; allowed a little porter and water and mucilaginous drinks. Discharged.

Case 4th.—L. W., aet. 24; sanguine nervous temperament, of delicate constitution but usually enjoyed good health, was taken on the 1st October with slight pain about the sigmoid flexure of the colon and frequent sanguinolent dejections. Had no fever, nausea, thirst or other symptoms of constitutional disturbance. Prescribed the turpentine mixture and mustard cataplasms to affected parts.

Oct. 2d. — Patient's sufferings somewhat increased and dejections larger, more frequent and of a darker hue, having the appearance of moss dipped in grumous blood; continued treatment of yesterday, except that a blister was substituted for the mustard poultice and emollient enemata with the addition of a few drops of turpentine and laudanum.

Oct. 3d. — Patient better; pain relieved and dejections more watery and less bloody, besides containing a considerable quantity of clay colored fœcal matter; compact and hard; continued treatment.

Oct. 4th.—Patient convalescent; discontinued the mixture and enemata.

Remarks.—This was an uncomplicated case of dysentery seated in the lower part of the colon and rectum and did not call for the use of mercury. This gentleman lived on a healthy track of pine land remote from the causes of miasmata and other morbific agents. His recovery was rapid, and there was left none of the marks of constitutional disorder about him as in those cases denominated bilious, but which should be properly considered as complications.—*New Orleans Journal.*

ART. X.—*Notes of Hospital Practice at Bellevue, New York.* By D. MEREDITH REESE, M. D., Resident Physician.

This institution is the great Charity Hospital, for the medical and surgical treatment of the pauper population of the city; and, during the last two years, has provided for an average of nearly 600 patients. They are, for the most part, the victims of intemperance and vice, and only brought hither in very advanced stages of disease, too often only to die. Nevertheless, almost every variety of disease is here exhibited; and a single year, diligently improved by a residence in this hospital, on the part of a student, may prove the best clinical school to which a young practitioner can have access. Of these advantages several of the assistant physicians have availed themselves, and are already giving promise of professional eminence.

In the following paper, it is proposed to record only a few of the practical and useful lessons either derived from experience here, or confirmed thereby.

Typhus Fever.—The opportunities for observing the results of medication, in cases of typhus or ship fever, have been ample, and perhaps unsurpassed in the country. It has been, however, only in the later periods of the malady that the patients have been admitted; very rarely, indeed, before the eighth day, and often much later, and not until complicated by some local mischief.

It has been uniformly observed, that those patients who had been subjected to any active medical treatment before admission were in a

worse condition than those in whom no medication had been previously resort d to. And whenever bleeding, purging, vomiting, &c., had been employed, before they were brought hither, the prognosis was unfavorable; and, with very few exceptions, these cases proved fatal. How far the depraved constitutions of this class of patients may have rendered them unable to bear depletory remedies of any kind, even in the earlier stages of the fever, may not absolutely be affirmed; but the fact of their being contra-indicated, and always mischievous, became apparent in all our cases.

In regard to the treatment resorted to, no active means were employed, except when complications demanded a deviation from this rule; or when diarrhœa or erysipelatous inflammations supervened. These and other analogous sequelæ were very rarely observed, except in those cases which had previously been under medication before they reached the hospital, or in which pneumonia, or some other form of the phlegmasiæ, had co-existed with the fever. The few cases which occurred as exceptions were traceable to too early and too liberal use of stimuli.

Our usual course with the fever patients was to enjoin absolute rest in bed, with free ventilation, cool air, and warm drinks, the latter being nutritious, and occasional doses of the sp. mindereri, with or without a grain of ipecacuanha, and continued until free perspiration was induced. When much *heat* prevailed, ice and iced water were found grateful, and if necessary, the head, face, and neck were sponged occasionally with iced water. When diarrhœa or delirium was present, counter-irritants to the extremities and abdomen were relied on, which were always useful. And if, on the subsidence of the fever, after longer or shorter persistence, there was a flagging of the pulse, or other evidences of great prostration, wine whey, milk punch, with brandy and ammonia, were consecutively employed, and afterwards persevered in, according to the indications. The counter-irritation to the surface by mustard or epispastics was superadded, if delirium or any degree of coma were present.

The only modifications of this treatment were—in complicated cases, or severe sequelæ, cupping for pneumonia; injections of nitrate of silver for protracted diarrhœa; calomel, opium and ipecacuanha in combination for dysenteric symptoms; and for supervening erysipelas, the internal use of quinine and the external application of ice, nitrate of silver and blisters.

Under the treatment thus described, we had the satisfaction of witnessing a degree of success which has rarely been exceeded by any other plan; and, when the unfavorable condition of our patients when received is considered, the rate of mortality must be regarded as unusually small, the statistics of the hospital demonstrating that we lost less than one-sixth of our typhus cases, or about fifteen per cent.

In our numerous dissections of the fatal cases, more or less effusion into the ventricles of the brain was almost uniformly discovered; while the instances of intestinal ulcerations, or the morbid condition of Peyer's plates, &c., as described by the French writers, were but rare, and even then the cerebral mischiefs were more obvious and prominent.

It may be proper to add that, during the continuance of our endemic, for such it was for many months, there was no evidence furnished which

could be legitimately cited as favoring the theory that this fever was propagated by contagion; but, contrariwise, the proofs were ample that it was not communicable from person to person. For, although some of the nurses, and a few of the assistant physicans, contracted the disease while attending upon the fever wards, yet the same result would have followed, had intermittent or other malarious fever been prevalent; not by contagion, but by the epidemic atmosphere to which they were exposed, under circumstances which constituted a predisposition to an attack. The generation and perpetuation of pestilential typhus in a ship, jail, or hospital, by the flagrant violation of the laws of hygiene too often exemplified under such circumstances, ought never to have been perverted into an argument to bolster up the theory of contagion, which else had long since been abandoned among the relics of barbarism, from which enlightened science and rational medicine ought wholly to have escaped.

Burns.—Among the most numerous cases brought into the surgical wards of charity hospitals everywhere, may be reckoned the injuries received by burns and scalds, which, when extensive, are too often fatal. In the treatment of these injuries, we have had great experience and uniform success, when the patients were brought in soon after the injury. No fatal case of recent burn or scald has occurred in the hospital, although several have been extensive and severe. The universal treatment of all such cases is to cover the parts with wheaten flour thrown over the wounds by a dredging-box, which, if thoroughly done so as to exclude the air, and prevent its temperature from reaching the suffering tissues, will afford instant relief from pain, and allay all that nervous irritation which is the chief source of immediate danger in all cases of extensive burns. We have had an opportunity to test this practice in terrible burns occasioned by explosions of gunpowder, in scalds from the bursting of steam-boilers, in examples of persons while drunk falling into the fire, and others in which the clothes were burnt off the body by the combustion of spirit gas, &c. In all these cases, and in some of them scarcely any portion of the body had escaped—and notwithstanding, in a few of them, the integuments were literally baked, so that extensive and deep-seated suppuration and sloughing were inevitable, and had afterwards to be endured—the external application of the flour was in the first instance our only remedy, and this was continued for one or more days while the acute effects of the injury demanded it. The superficial portions of the burn or scald would often heal under this application alone; and the solutions of continuity, more or less deep, which remained open and discharging, were then dressed with lime-water and oil, by means of a feather, to which creasote was added if the granulations were slow, or the sloughs tardy in becoming loose. Under this dressing, the most formidable burns have been healed; and, even when the face has been involved, there has been scarcely any considerable deformity. In one of our patients, the face being horribly burned by an accidental explosion of gunpowder, the grains of powder having been imbedded in the skin, very great apprehensions were indulged that the discoloration thus produced would permanently disfigure

and deform the countenance. But, after the persistent application of the flour for three successive days, and until the tumefaction of the face and head had subsided, it was found that, with a few applications of the lime-water dressing, the cicatrization was complete, and even the discoloration was removed.

If this simple remedy were resorted to in the severe scalds sometimes occurring from explosions of steamboat boilers, &c., there can be little doubt that the fatality of such burns would be very rare; while the popular and mischievous methods of applying raw cotton, oil, molasses, salt, alcohol, spirits of turpentine, sugar of lead, ice, &c., to *extensive* and *deep burns*, are all of them injurious, and often destructive to life.

Syphilis.—A large majority of the surgical diseases found in this hospital are constitutional syphilis, in the secondary or tertiary forms. Among these, cases of iritis are frequent, and are generally cured by mercurials and opium internally. Periostitis, in every form and location of nodes, is very generally removed by the iodides and arsenic, the latter often successful after the former fails. *Rupia* yields to large doses of the iodide potassæ, with corros. sublimate, or in some cases without it. The iodide of quinine has been found useful both in seondary and tertiary syphilis; nor, indeed, has any form of this terrible malady been found irremediable, except when the larynx and trachea have extensively suffered. In one case, tracheotomy was resorted to, without, however, any other than temporary relief. It is scarcely necessary to add that, apart from the medication above named, very great reliance is placed, in constitutional syphilis, upon liberal and even generous diet.

Pedicular Disease.—This affection is happily rare in this country; but a few cases have occurred in the hospital, one of which was as remarkable as any recorded in the foreign books. The patient was not merely covered with living lice upon every square inch of his body, but they were constantly issuing from the pores of his cuticle, beneath which they existed in incredible numbers. By scraping any part of his skin with a stick, or any other solid body, hundreds of living lice would fall out of the abraded cuticle, and might be collected upon a sheet of paper, as was several times done, for exhibition to visitors. In other respects, the man was in tolerable health, but so stupid that but little of his history could be learned, and nothing of the origin or duration of the disease. He was cured by the external application of dilute ung. nitr. hydrarg., with a very slight ptyalism.

Elephantiasis.—Several cases of this formidable disease have been presented, but not one of them was in a state admitting of successful treatment. The most remarkable of them was in a woman of immense size, said to weigh four hundred and fifty pounds. With the characteristic degeneration of the skin of the abdomen, thighs, and legs which belongs to this malady, she suffered under ascites, and died soon after entering the hospital. Such was her obesity that the abdominal walls were found to be of the thickness of five inches, and the fatty deposits about the heart measured two inches in thickness.

Acute Rheumatism.—This disease has been successfully treated in numerous cases by large doses of nitrate of potash, ʒi to ʒij having been given and repeated every few hours. No bad symptoms followed in any case, but it failed sometimes, when the colchicum afterwards succeeded. Our experience has not been sufficient, however, to determine upon the comparative merits of this plan of treatment.

Phthisis Pulmonalis,—The advanced period of tuberculous phthisis, in which most of our patients reach the hospital, affords but slender encouragement from medication. In those, however, with whom any rational hope could be indulged from treatment of any kind, the cod-liver oil has been frequently and extensively employed, and many of the patients have improved under its use, and been discharged from the hospital, so that their subsequent history could not be traced. The apparent effects have been an improvement in the appetite and strength; diminution of cough, expectoration, diarrhœa, and night sweats, with the establishment of regularity in the alvine evacuations; but further experience will be required to estimate accurately the powers of the remedy. The crude and clarified oil have both been tried, though preference is given to the latter. From a teaspoonful to a tablespoonful has been given three times a-day.

Erysipelas.—During every winter, and at times when an unusual amount of humidity prevails, there has been, in the surgical wards, and sometimes simultaneously in every part of the hospital, a marked tendency to erysipelatous inflammation, so that occasionally it may be said to approach an epidemic form. It has then been deemed expedient to collect all the cases scattered over the house into one or more wards, rather for the facility of their treatment than from any dread of contagion. Ice and iced water have been found to be invaluable as a local application, and this, when the free application of nitrate of silver, iodine, and blisters failed to arrest the inflammation, or prevent its spreading. The constitutional treatment has been chiefly quinine, wine, &c., under which a majority of our patients recovered. In phlegmonous erysipelas, numerous and extensive sacrifications, allowing of the free escape of the pus, together with moderate but unremitting pressure by rollers, have proved signally successful in many formidable cases—appropriate constitutional treatment, to support vitality, having been steadily persevered in throughout.

Peurperal Peritonitis.—A sudden irruption of this fever has appeared, in lying-in wards, several different times, the epidemic character of which has been in every instance promptly arrested by abruptly changing the apartments to another floor of the house, having a different exposure to the external air, and in which a due ventilation could be secured. The wards in which the fever appeared, were, meanwhile, thoroughly cleansed and purified by whitewashing, &c., and not until thoroughly aired and renewed by a change of furniture and bedding, have they been again occupied. Two or three weeks have been found a sufficient time to vacate the wards, under such circumstances. The medical

treatment has been various, and in rather more than half of our cases unsuccessful. The opium practice, when exclusively relied on, has uniformly failed. In no case has recovery taken place without bleeding, and yet, in several well-remembered examples, no advantage was derived from either venesection or leeching, although both had been liberally and judiciously employed. The same may be said of the mercurial treatment, with and without opium, and blood-letting, although all these remedies were used in every example of recovery; yet, in some instances, they all failed. The most numerous instances of success, however, were in those patients who, during the epidemic, were treated as follows: Immediately after delivery, a combination of ten grains of calomel with ten of camphor was given. On the appearance of the characteristic rigor, when this occurred, or when without it other symptoms indicated an attack, the same dose was repeated with two grains of opium. When pain and tenderness became distressing, and in the onset of the febrile excitement, a full bleeding at the arm was resorted to, the patient being placed in an erect position, and approaching deliquium being secured. If but little relief to the pain and tenderness followed this remedy, or these symptoms speedily returned, twenty or more leeches were applied to the abdomen, and, meanwhile, calomel and opium, in doses usually of from five to ten grains of the former, and one to two grains of the latter, were repeated every three or four hours; and in urgent cases more frequently. In these circumstances, a large blister plaster, covering the abdomen, and dressed with mercurial ointment on its removal, was found signally beneficial in several examples. The ptyalism, when it occurred under this treatment, was but slight, and in no instance severe. The patients who recovered under this treatment used ice and iced water freely, all their drinks being cooled with ice. The extent to which bleeding was carried was various; two or three full venesections, besides leeching, having been sometimes called for during the first twenty-four hours, and with uniform advantage, as the results proved. So also the calomel was varied in dose, and in the aggregate quantity, according to circumstances. Small and even very minute doses, often repeated, were relied on in several cases; but every one of these proved fatal. So also scruple doses, with and without opium, and venesection were tried, but with less favorable results than the course above mentioned.

Chloroform and Ether.—The employment of these anæsthetic agents by inhalation, has been signally successful in every department of hospital service. At first, and immediately after its introduction into the Massachusetts General Hospital, the ether was used in all surgical operations of any magnitude, and in various painful and spasmodic diseases. No permanent evil effects followed, except in a single instance in which cerebral disease, probably of organic character, had pre-existed, and in this case the operation for the removal of extensive exostosis was necessarily tedious, and the inhalation had to be continued, and more than once repeated. The wound healed kindly, but the patient had to be subsequently sent to the insane department, and is deemed incurable. As, however, he had exhibited indications of insanity long prior to the

inhalation, the mischief cannot fairly be ascribed to the etherization, although it would be indiscreet to employ this agent in any similar case. In no other instance did any evil happen which could be legitimately traced to the use of ether, although it was used very frequently for months, and until the introduction of *chloroform.*

This latter article was adopted as a substitute for the ether, as soon as authentic accounts were received of its employment by Dr. Simpson with success, and chiefly because we had found that the effects of ether were too slow in some cases, unequal in degree in others, while it occasionally failed. The chloroform used at first was prepared by Dr. John Miller, then chemist and apothecary to the hospital, and was of entire purity and great strength. Our early experience with it developed two objections to its use; namely, it was sometimes too rapid in its action, occasionally cumulative, and deep anæsthesia came on too suddenly; hence we used it with great caution, and closely watched its effects. Anxious to avail ourselves of its greater certainty than ether, and yet avoid too deep anæsthetic effects, we determined to dilute the chloroform with ether, in the proportion of two measures of the latter, by weight, to one of the former. With this mixture, we have had every reason to be satisfied, and have hence very rarely employed the chloroform alone. The suggestion of this mode of dilution was first made by Dr. W. H. Van Buren, one of the visiting surgeons, and at his instance it was prepared and used for a surgical operation, with such entire success that we have employed this mixture ever since. In some instances, it is true, we have found patients so unsusceptible, that we have resorted to the chloroform alone, until the desired insensibility was produced, and then rendered the effect persistent, as long as necessary, by using the mixture of chloroform and ether, regarding it as a safer practice, and equally efficacious to this end.

Our method of employing these agents has been either by applying to the mouth and nostrils a hollowed sponge, moistened with ʒi or ʒij of chloroform, or ʒss of the mixture; or, by means of a towel or handherchief in lieu of the sponge, and which, on some accounts, is to be preferred. In no case, have we persisted continuously to apply either of these agents, so as to exclude the atmospheric air, but have always allowed the alternate inhalation of the air and that of the chloroform or ether. And our rule has been to remove the agent from the mouth and nostrils as soon as anæsthetic effects have become manifest, re-applying the sponge or towel occasionally, if necessary. With these precautions, our experience has been so entirely free from any untoward or unpleasant consequences, that we can scarcely feel the force of the objections recently urged against anæsthetic agents, and are constrained to apprehend that the mischiefs described have resulted either from the want of due caution in their employment, or the lack of discrimination in the subjects, by overlooking existing pathological states which contraindicate their use. Certainly, we can have no sympathy with the surgeon whose unsuccessful operations are ascribed by himself to etherization; much less is any man authorized to attribute the want of success in another, to the fact that either chloroform or ether had been used in the case.

The following are a few of the specialities in which these agents have been employed here; namely—

1st. In *reducing dislocations;* and here experience has proved the invaluable importance of the discovery which has furnished to the profession these means of completely relaxing the muscles and ligaments of the larger joints. In several instances, luxations at the shoulder and hip of long duration, which, after repeated trials, could not be reduced by any amount of physical force applied in the ordinary way, were, after the inhalation of chloroform by the patient, found capable of ready reduction with the thumb and finger. If no other good were conferred by chloroform, this alone would render the discoverer a benefactor to the world.

2d. In hysterical, epileptic, and puerperal convulsions, we have had frequent opportunities of witnessing the speedy and effectual relief afforded by the inhalation of chloroform and ether; and, in the latter of these forms of disease, after extensive venesection and the other most potent antispasmodics had been tried in vain.

3d. In delirium tremens, we have frequently been able permanently to calm a violent patient, and induce profound and protracted sleep, after both lupuline and opium had failed.

4th. In paroxysmal or spasmodic asthma, a very few inhalations of ether or chloroform, without even approaching full anæsthesia, will be found more effectual for relief than any other remedy.

In tedious, protracted, or severe labor pains, and especially when malpresentation, or other causes, render painful operations necessary, whether manual or instrumental, the inhalation of chloroform, with the precautions already named, has been found to be uniformly safe, and pre-eminently useful, both to the mother and child; while it divests the most formidable operations of obstetric surgery of their terrors, alike to the physician and his patient. We have not encouraged the use of this agency in natural labors, unattended by any considerable severity, although in these cases no evil has happened to mother or child in our hands. But, in all cases in which it has become important to lessen the sufferings of the mother, we have uniformly administered the chloroform, and have had every reason for undiminished confidence in its innocence and utility. Indeed, we have good ground to believe that, in several cases, our patient would have died undelivered, if we had been without chloroform; and yet, in more than one of these, the child as well as the mother was saved. Nor have we been able to detect, in a single instance, any subsidence or diminution of the labor pains, either in frequency or force, during the moderate degree of anæsthesia, which is all that is necessary for any useful purpose in obstetrical practice. And yet we have been obliged, in some severe labors, to continue the repetition of the inhalation during several hours—applying chloroform to the nostrils and mouth for a few moments only, however, at the commencement of every pain—our patient importunately pleading for it, after having felt its efficacy in relieving her sufferings. Such has been our hospital experience in certainly one of the largest lying-in departments in our country.

Surgical Operations.—In all cases, when the severe or formidable operations of surgery have been called for, whether by the knife, saw, chisel, or red hot iron, we have not hesitated to give our patients the benefit of chloroform; and, in all this variety of infliction, we have witnessed entire immunity from pain, and in most cases there has been no consciousness of operation. The limb has remained unheld and unmoved while the actual cautery has been made repeatedly to traverse a joint; and, in one instance of the amputation of a thigh, the patient remained ignorant of his mutilation until the fifth day, when it became necesssry to dress the stump, he all the while supposing that his leg was bound up in splints, and complaining of that very common, though imaginary, sensation in the toes of the amputated limb. The success of operations, and the early healing of the wounds thus made, have in no instance been hindered or delayed, so far as we could perceive; and we have even surmised the contrary. In primary amputations, after compound or comminuted fractures, when these are judged necessary, the additional shock to the nervous system, so much dreaded, is in a great measure obviated by the judicious use of chloroform. And, whatever may be the prejudice existing or engendered by panic-makers, who are for the most part mere theorists, the extensive experience and success of practical men, here and elsewhere, should disabuse the profession and the public of the erroneous views which have been promulgated of late, on the basis of a few unsuccessful and probably indiscreet experiments, and isolated cases of unfortunate termination. The profession should not only allow their patients the advantages derived from this new agency to protect them from suffering, but they should feel that they are not at liberty to hazard the safety of their patients by withholding from sufferers of every class the benefit of anæsthesia, now that science has conferred this boon upon afflicted humanity.

Cholera.—During the recent epidemic by which our city and its vicinity so severely suffered, there were but very few cases at Bellevue, notwithstanding the large number of patients here, and of a class signally predisposed to become its victims. The preventive measures relied on were, a strict attention to cleanliness in and about the entire premises; thorough and persevering ventilation of all wards; the extensive use of ice and iced water; and a careful regulation of the dietary habits of all the inmates. Good dry sugar was at once substituted for molasses, and better supplies of food, both in quantity and quality, were forthwith provided. Very little medication of any kind was permitted, and all cathartics were forbidden. When the premonitory diarrhœa began to exhibit itself, it was made the duty of the orderly or nurse of every ward to notify the assistant physicians of every instance in which looseness of the bowels was observed; and, at stated hours, a medical inspection of all the patients was made both day and night to detect the earliest symptoms, which there was a disposition to conceal. The prescribed antidotes were placed in every ward, to be in readiness at all times; and all the inmates were instructed in the importance of early treatment in case of an attack.

For several weeks, and even after the neighboring institutions on Blackwell's Island were visited with the epidemic, the hospital at Belle-

vue had wholly escaped; nor is it probable that we should have had a single case, had not the atmosphere of the entire premises been rendered impure and offensive to the last degree by the contents of the dead-house for the whole city, which is most improvidently located within a few yards of the hospital. At the climax of the epidemic, more than a hundred bodies were deposited here in a single day, whence they were to be transported in boats to "Potter's field." But the means of removal being inadequately provided, they were allowed to accumulate; and the effluvia became so offensive, that it was necessary to close all the windows opening towards the dead-house; and even then the stench was intolerable. All ventilation of the wards being thus precluded, one, and then another, case of cholera began to appear, and the premonitory diarrhœa now became almost universal throughout the house, a score or more being thus seized in a single night.

It was not until a number of deaths had occurred, including the keeper of the dead-house, and the gate-keeper who was located near it, that our remonstrances were heard; and the necessary provision to empty the dead-house, by removing the bodies every evening, could only then be obtained. From that time, the cases were few, and occurred at intervals of several days, so that all apprehensions of its becoming epidemic here were at an end. The whole number of cases during the summer did not exceed thirty, and several of these were brought hither. The persons attacked were chiefly broken down previously by age, intemperance or chronic disease of long standing, so that a majority of all the collapsed cases were fatal. Several of them had no premonitory symptoms whatever, while others concealed their symptoms until in a hopeless condition. The few recoveries were in persons who were treated internally by large doses of calomel, repeated every two to three hours, varying from ten to twenty grains, and usually in combination with capsicum, or camphor, or both; large quantities of ice were eaten, meanwhile, and the surface of the body covered with heat and stimulants. In other cases, however, it must be conceded that this identical treatment failed; but without it, none recovered. A slight ptyalism followed in three cases, one of which afterwards died of consecutive fever. Only two of our cases were bled, and one of these recovered. I have notes of all the cases, numbering twenty-nine, of whom eight only were saved.

Our success in arresting the diarrhœa was very nearly universal; and, indeed, only one case of death occurred when the premonitory symptoms were discovered. There was no novelty in the treatment of these—our reliance being chiefly on rest, ice internally, with heat to the skin, and an occasional dose of ether, sp. lavend. c., and vinum opii, mixed in suitable proportions, which was found sufficiently astringent, cordial, and anodyne for our purpose. The tinct. capsicum was occasionally tried in various combinations, but was found to offend the stomach, so that even laudanum was rejected when mixed with it, and retained only when given alone. . . . . .

[*American Journal.*

PART THIRD.

FOREIGN INTELLIGENCE.

PRACTICAL MEDICINE, &c.

ART. I.—*Case of Apoplexia Hydrocephalica.* By JAMES OGILVY, M. D., Coventry.

On the morning of the 31st March, I was called to visit the child of a ribbon-weaver, residing in this town, reported to have been suddenly taken ill. Before I could leave my house, a second messenger arrived, stating that the boy was dead. I found, on inquiry, that the child was about six months old; that it had been remarkably healthy, "never having had an hour's sickness in its life;" that it had been taken out of bed that morning quite well, but that, soon after being dressed, it appeared to change countenance, moaned once or twice, and in three minutes was quite dead. The evening before, the child had eaten a hearty meal, but as it appeared slightly griped, a small dose of "Godfrey and Rhubarb" had been given to it. I was informed that this was the sixth child which these parents had lost in a similar and equally sudden manner, but no investigation was made. The mother was in great distress, and was anxious that an inquest should be held, to ascertain the cause of death, and this accordingly took place.

On examination, the body presented a plump and firm appearance; the head was not larger than usual for a child of that age, the dimensions being sixteen inches in its greatest circumference, and eleven inches and a half from the meatus of one ear to that of the other, across the top of the head. The anterior fontanelle was perhaps rather more open than usual. The gums were broad, but none of the teeth had appeared. On laying open the cranium, considerable vascular turgescence was observable, but no sanguineous effusion. Owing to the numerous and strong adhesions, it was difficult to remove the skull-cap from the dura mater, except by piece-meal. On effecting this, a considerable expansion of the brain immediately occurred; indeed, it was impossible to compress the cerebral mass again within the limits of the calvarium. On opening the ventricles, about two ounces of serum flowed from them. There was no dilatation of these cavities, as is usual in chronic hydrocephalus, and there was no softening of the brain. The heart and lungs were perfecty healthy. The stomach was nearly empty, the contents being simply a little pap. The liver was slightly enlarged.

There seems little doubt, that in this case the effusion of water in the brain was the cause of death, and from attentive consideration I am of opinion, that the effusion took place suddenly. It is the apoplexia hydrocephalica of Cullen, a species of disease rarely met with. Dr. Copland, that most extensive and accurate observer, says that he has not seen any case that could be strictly called idiopathic. It most commonly appears in the advanced stages of the exanthemata, after the repulsion

of chronic eruptions, as tinea capitis, &c., discharges from the ears, or after the sudden arrest of diarrhœa or dysentery. Goelis has given a very accurate description of the disease, which he terms the water-stroke, (*wasserschlag.*) He remarks, that in the idiopathic form of the complaint a degree of vascular turgescence, and sometimes of inflammatory action, is found on dissection, and, owing to the absence of symptoms indicating such a state, seems to occur suddenly, and to be co-incident with the effusion. Such was exactly the state of matters in the case under notice. The complaint differs from hydrocephalus, either in its acute or chronic form, in the small quantity of the effusion, generally from two to four ounces only being found.

The following are a few of the practical inferences to be deduced from a consideration of the case. Had time permitted, the immersion of the body in a warm bath; cold applications to the head, and the free abstraction of blood, by leeches, from the occipital region, in order to relieve the vascular congestion, would have been proper. It is possible that this turgescence was increased by the dose of "Godfrey" given the previous evening. The noxious compound varies in its strength in different places, according to the fancy of the druggist. It generally contains from three to five drops of tincture of opium in a teaspoonful. It is very extensively and indiscriminately used in this part of the country by the poorer class of mothers and nurses, as a sedative, for all sorts of children's aliments, and numerous are the instances of its deleterious effects. Of course, the avoidance of such pernicious drugs in families so predisposed to head affections as this is most advisable.

Parents are generally extremely anxious to get rid of any eruptive complaints appearing on the heads of children; this sometimes proves very injurious. The suppression of eruptions on the scalp and behind the ears, has often been known to occasion the disease. Dr. Cheyne, (I think it is,) even supposes that the diminished frequency of these eruptions has rendered hydrocephalus more common now than formerly. Lastly, the frequent use of cold applications to the head, and the discarding of caps &c., within doors, are plainly indicated.—*London Lancet.*

Art. II.—*Report of certain cases of Yellow Fever, treated in the Detachment Hospital at St. John's, from the 2d to the 19th December,* 1849. By John Furlinge, M. D., Civil Practitioner, late in charge of Detachment Hospital at St. John's Antigua.

Five cases of yellow fever were admitted, of which two died. The men had been marched into St. John's from the Ridge,* on the 30th November. One or two had been complaining on the evening of the 1st December, and ascribed their indisposition to fatigue and cold from the preceding night's march. They took purgative medicine. On the following morning three others were added to the list, and the five were admitted into the hospital with fever. The symptoms were very urgent

*An elevated spot, about twelve miles from St. John's, where the garrison is situated, and where malignant yellow fever was prevailing.

in three; headache was violent; sense of tension from temple to temple, with a feeling as if the brain were compressed; pains of back and calves of legs were prominent symptoms, with hot, pungent skin; injection of eyes; pulse quick and full; tongue generally moist, and in two or three cases rough and furred, but still moist. After thirty-six hours, the pulse became slower, sometimes natural as to frequency; skin was tinged lemon-coloured in all; the injection of the eye appeared to be sclerotic, and would seem to indicate a like condition of the dura mater, &c.

The treatment in three was bleeding to fainting.* In one of the three the bleeding was repeated in three hours, as severe headache had returned, when about eight ounces were abstracted; he became faint, and had no return of headache. After bleeding, brisk purgation was used; the purgative of calomel and compound extract of colocynth, followed up by a solution of sulphate of magnesia, and carbonate of magnesia. After the bowels had acted copiously, calomel and quinine,† five grains of each, were given every two hours, with cold douche to head, and clothes wet with cold water constantly applied to the same, with sponging the body, &c. One man had a blister applied to the nape of the neck. The fatal cases were treated in the same way, with the exception of bleeding, as their symptoms did not seem to warrant the abstraction of blood. They both were apparently doing well, alarming symptoms supervening when every reasonable expectation of their recovery was manifest. On the morning of the evening of the death of one, he was sitting up in bed, taking breakfast, and said there was nothing the matter with him but weakness. At twelve at noon he had hiccup, and hæmorrhage from his gums; at four P. M. black vomit, and at nine P. M. he was dead. He appeared labouring under cinchonism, as he had become deaf, and complained of noises in his ears. He died on the fifth day.

The other man (who died on the seventh day) appeared dreadfully alarmed at the death of his comrade, and became incoherent that night; he began to sink next day, and died the following evening at ten P. M.; he was apparently convalescent on the day preceding the night when he became incoherent; he had no black vomit, but was lemon-coloured.‡

Although a fever of a highly malignant type has been chiefly confined to the Ridge, I think it right to remark that there has been all along a general epidemic tendency to fever throughout the island, and of a rather severe type. I have twenty estates under my professional charge, situated in all quarters of the island, and there are a great many labourers on them, white, black, and coloured, among whom a good deal of fever has prevailed, some very severe remittents, and all manifesting great cerebral disturbance.

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*Average quantity taken, thirty-two ounces.

†See a condensed but good account of the use of quinine in miasmatic fevers, in "Ranking's Retrospect," vol. iii.

‡In this outbreak, the "judicium difficile" was well illustrated, prognosis being quite at fault: one man who had been walking about for two days, took his bed and died.

The creole blacks, whites, and mulattoes, have suffered from the epidemic, but suffered less severely than Europeans, the type being generally remittent, (with a few intermittents,) among whom some deaths have occurred, the head suffering much; and in some there has been coma from the first, not always fatal,—the affection, whether intermittent, remittent, or malignant yellow fever, evidently arising from the same atmospheric inquination, the type varying according to susceptibility or acclimated state of the individual.—the malignant fever occurring in the recently arrived Europeans; the milder forms in natives, or those acclimated. The orifice made in the veins of those who were bled did not heal, but gaped, and matter formed in each, and the blistered surface in one (who recovered) became ulcerated and of a gangrenous look, and he subsequently suffered much from large boils, and had a carbuncle at the inferior angle of the right scapula. In two of the patients, during convalescence the pulse became very slow—48 and 56 in the minute—for some days; the same had been remarked by other practitioners.

The fever, no doubt, is to be ascribed to the dry and sultry weather in July and August, followed up by rain, and then by intense heat, thus giving rise to malaria, of a highly malignant nature, pretty generally over the island, manifesting its effects more severely in certain localities.

The Ridge is considered a very healthy spot, and I undertand no officer has died there, of yellow fever, for twenty-six years.

The treatment was that generally followed, although I should think it more scientific and accordant with our pathological notions to bleed, and then give calomel, with nitre and soda and sweet spirits of nitre, with blisters to neck, cold to shaven scalp, and sponging the body; and on the slightest remission, to administer quinine, in five-or-ten grain doses, every hour, till cinchonism was induced, or till other symptoms indicated its further use to be necessary. It certainly clashes with all pre-conceived notions, to give quinine to a patient with hot skin and violent headache, although as far as I have been concerned, I see no cause to be dissatisfied with the result, as regards the patients treated in the Detachment Hospital.

P. S.—The deaths averaged upwards of fifty per cent.; and a practitioner of more than thirty years' experience in this island, told me it was the most malignant fever he ever witnessed. A military medical officer of rank and long experience, in conversation, said, that after thirty-six hours' treatment was of no avail, they died in spite of everything; and it was a toss-up whether death or recovery followed. I may mention that the microscope showed the black vomit to consist of blood-corpuscles, occsaionally mixed with epithelial scales. The corpuscles appeared, I thought, flatter than natural.—*Ibid.*

ART. III. — *Oak-bark and Alum Injections in Vaginal and Uterine Discharges.* By THOMAS WEEDEN COOKE, Esq., Medical Officer for the Diseases of Children at the Royal Free Hospital.

Some months since a lady placed herself under my care, for a slight prolapsus of the uterus, induced, as she supposed, by violent exertion in lifting her husband (a large man, suffering from gout) into bed. Besides the prolapsus, there was also a polypus, protruding from and distending the mouth of the uterus, and there had been, previous to my seeing her, considerable leucorrhœa. Upon digital examination, I was surprised to find, considering she had had children, and was past the meridian of life, so contracted an inlet that the index finger was with great pain and difficulty passed into the vagina; there was also a roughness and dryness of the mucous lining, and very considerable heat; the bowels were very much confined; there was ardor urinæ, whilst the whole system was effected with a symptomatic fever, suggestive of local inflammation; hot skin; thirst; dry tongue; small, quick pulse, &c. Such violent symptoms appeared strange and unaccountable, until the history of the case disclosed the cause of all this distress. For some weeks she had been injecting decoction of oak-bark with alum, and had not taken the precaution to wash out the congealed albumen of the leucorrhœal discharge. The consequence was, this leathery compound collected upon the walls of the vagina, and os and cervix uteri, contracting the external orifice, and inducing all the inflammatory symptoms I have described. I was enabled to remove a small portion only of the offending matter with my finger; and on the next day, Dr. Locock saw her with me, and suggested another attempt, but the pain produced was so great that it was impossible to succeed entirely. By warm water injections, however, some lubricating ointment, and saline aperients, the vagina was cleared in about a week, and all the urgent inflammatory symptoms subsided. A case in every respect similar has just occurred to me, although the symptoms were less severe, and the same means of relief were resorted to with beneficial result. Whilst in consultation with Dr. Locock on the former case, he kindly gave me the history of a still more interesting one, which occurred in his practice some years ago, where a large sausage-like portion of hardened albumen proceeded from the upper part of the vagina, and had been mistaken for a hernia of the bowel. He, however, broke off the supposed hernia, and removed it, much to the wonderment of the attendants. I trust Dr. Locock will pardon me for mentioning this case without his consent, as, indeed, I am sure he will, if it should be considered likely to prove a serviceable warning, or, rather reminder; for, of course, we all know, although we may not always think to warn our patients of it, that these astringent injections do solidify the albuminous discharges females are so obnoxious to; and may produce the evil consequences these cases represent. For myself, I always request the patient to syringe with water three or four times, both before and after using the astringent.—*Ibid.*

ART. IV.—*The Mode of Action of Morbid Poisons.* By Dr. J. W. TRIPE.

Dr. Robert Williams in his elaborate work on morbid poisons, was the first clearly to point out the analogy between the action of the ordinary and of the morbid poisons. The laws which he pointed out are the three following:—"Firstly, that all poisons have certain definite and specific actions; secondly, that they lie latent in the system a certain definite but varying period of time before these actions are set up; and lastly, that the phenomena resulting from the poison when roused into action, vary according to the dose or predisposition of the patient. These laws are common to all poisons or classes of poisons. To these laws we may add a fourth, and fifth, viz., that the specific action of poisons depends on the affinity existing between the liquids and the solids of certain parts of our organism, and the poison ingested; and fifthly, that this specific action ceases on the elimination of the poison from the system. The first law is one almost universally acknowledged, and forms the basis of the remedial part of the physician's art; for unless medicines had definite and specific actions, they would be valueless as remedies. As instances, we may adduce hydrocyanic acid, strychnia, castor oil, &c., which are severally known to produce, when taken into the fabric, certain determinate and invariable effects. It has long been admitted, that certain medicines—poisons—act more or less invariably on certain membranes or organs, or on certain sets of membranes or organs; but that the action depends on an affinity between the elementary tissues, or part of them, of the organs so acted on, and the poison itself, is less universally allowed, although it is, nevertheless, equally as true. In poisons of this class are included antimony, arsenic, copper, strychnia, and many others. In proof of this position we may adduce the experiments of Blake, as quoted in the *British and Foreign Medico-Chirurgical Review,* (July, 1848, p. 181–9.) He states that his experiments warrant the following conclusions: "That various substances—mineral medicines—may be arranged into groups according to the similarity or dissimilarity of their effects, each group being distinguished by reactions not to be found in any other class, while the re-action of each of its members closely resemble each other. The classes thus formed agree with those which are adopted by chemists in their arrangements of the different elements according to their isomorphous relations; and the only conclusion to be drawn from this interesting coincidence is, that the physiological action of these substances depends upon some property they possess in connexion with their isomorphous relations." Thus potash and ammonia produce analogous effects; strontia, baryta, and lead; soda and silver; lime, magnesia, zinc, copper, manganese, nickel, and cadmium; platinum, palladium, iridium, and osmium; phosphorus, arsenic, and antimony; selenium and sulphur; and lastly, chlorine, iodine, and bromine, form separate classes, each of which have the most striking analogy in their physiological actions. The metallic salts in general; the salts of potash and baryta, arsenic and phosphoric acids, agree in destroying the action of the heart; the greater part of the

acids, and of the salts of silver increase its irritability. The doses, however, of these substances necessary to produce their specific effects vary considerably.

The second law, that all poisons lie latent in the system for a definite but varying period of time, admits of but one exception, and that is more apparent than real, inasmuch as although comparatively the action is instantaneous, yet a certain short interval elapses between the taking of hydrocyanic acid and its effects. Narcotics, purgatives, diuretics, and other classes of medicines, all occupy a period of time of longer or of shorter duration, according to the condition of the patient as regards plethora, state of constitution, &c., and also according to the greater or lesser time ordinarily occupied by each medicine in producing its effects.

As an example of the third law, Dr. Williamson adduces the action of oxalic acid. If this poison be taken in a small dose, death ordinarily results from inflammation of the stomach; while if the dose be very large, death may happen in a few minutes from the shock to the nervous system. We here have a good example of the modification induced by a variation in the dose; tartar emetic may be mentioned as another example.

The fourth law, that the specific action of poisons depends on the affinity existing between the liquids and solids of certain parts of our organism, and the poison injected, does not admit of so ready a proof as the other laws.

The following considerations may be adduced in favor of it:—firstly, that the ordinary action of a medicine may be induced on the distant organ, or organs, whenever it finds its way into the fabric, whether it had been introduced by the stomach, or injected into the blood. The experiments of Dr. Blake, already related, afford strong confirmation of this statement. The well-known fact, that particular purgatives will act on definite parts of the alimentary canal, that diuretics act on the kidneys, mercury on the liver, iron on the blood, all prove the same. Additional proof is also afforded by particular poisons attacking only particular viscera or tissues; and by their being found in greater quantity in certain organs, or tissues, as copper in the lungs, arsenic in the liver, &c., and in certain secretions, as sulphuric acid in the urine.

The results of the disease caused by the introduction of the morbid poisons into the blood tend to the same end. Mr. Paget, in his Lectures on Nutrition, &c., (published in the *Medical Gazette*,) adduces the Essays on Symmetrical Diseases, which were written by himself and Dr. Budd, as evidences that all diseases in which the two corresponding portions of the opposite sides of the body are similarly diseased, depend on the circulation of a morbid material in the blood, and an identity of compositition in the tissues, affected. He then proves, that certain morbid poisons, or other morbid matters, have certain "seats of election." Thus the syphilitic poison attacks in some patients corresponding portions of the tibia and of the scull with great exactness. The pelvis of two lions were exhibited, in which new osseous matter had been deposited, by a rheumatic disease, producing an irregular kind of pattern, both sides being precisely alike, thus proving beyond a doubt that the

specific action of the morbid poison must have resulted from some affinity between it and the tissues attacked.

That the specific action of the poison ceases on its elimination from the system, cannot be very readily determined, as we cannot easily ascertain when the whole of the poison has passed out. Perhaps the best and most certain method of determining this point, is to examine chemically the urine and other secretions—excretions—to ascertain for how long a period the poison is passing off. But although this has been, and may be readily done in the case of mineral poisons, yet it cannot be applied to the class of morbid poisons, as we have no physical or chemical means of determining their existence. The only organic poison that we can prove to become mixed with the blood, and to pass out of it again—the amanita muscaria—affords very strong evidence of the truth of this law. The following quotation from Dr. Pereira's Materia Medica, first edit., vol. 1, p. 15, supports this: "A man, for example, may have intoxicated himself to-day by eating some of the fungus; by the next morning he will have slept himself sober; but by drinking a teacupful of his urine he will become as powerfully intoxicated as on the preceding day." Can more powerful evidence be afforded of the entrance of the morbid poison into the blood, the circulation of it through the system, the production of its peculiar effects on the brain, the elimination of the poison through the agency of the kidney, and the consequent cessation of its specific action?

In opposition to this view of the subject, it may be objected that the specific effects of lead, or of arsenic, will frequently continue for weeks, or perhaps for months, after the poison was taken into the system, and that we have no right to assume that this action was caused by the actual presence of the poison. It has, however, been shown, that arsenic may continue to be excreted from the body for as long a period as five weeks after the dose was taken; and I know of a person who excreted lead by his skin for more than three months after he had ceased to be exposed to the influence of the poison. Most, if not all the specific effects of a morbid poison may apparently cease before the whole of the poison is eliminated from the system. Thus a person may infect another with the exanthematous disease from which he has suffered, after all the ordinary specific effects of the poison have ceased; that is to say, after the eruptive, and sometimes even after the desquamative stage has passed by.

Dr. Williams further states, "that the general laws observable in the actions of morbid poisons are for the most part precisely similar to those which govern medical substances, or only differ in a few minor points. These poisons have their specific actions, their periods of latency, while their phenomena equally vary according to the dose, or the predisposition of the patient." That the poisons are specific is proved by the precision of their course, and of the pathological phenomena which each individually exhibit. Morbid poisons, also, have their periods of latency, the duration of the period varying in the different diseases induced by them. Thus, the poison of scarlet fever ordinarily lies latent from a few hours to ten days; of measles from ten to fourteen days; and of small-pox from sixteen to twenty days.

The chief distinctions between the morbid and the mineral poisons consists, first, in the power which the former have of increasing within the system to a comparatively indefinite extent; and, secondly, in their specific effects being independent of the amount of the virus absorbed, a small dose producing as certain and as severe effects as a large one. Many of them, also, are capable of infecting persons at considerable distances, and of exhausting the susceptibility of the membrane diseased to any future attack. These peculiarities are possessed by the virus of scarlet fever, and will, therefore, be briefly considered.

The theory of the increase of the virus of morbid poison within the system was propounded by the ancient physicians; for instance, Hippocrates attributed the phenomena of fever to a morbid matter in the blood, which being *concocted* for some days, was rendered fit for expulsion from the body. This theory has been revived and more philosophically explained by Liebig, who ascribes the peculiarities of this class of diseases to the fermentation of the morbid poison in the blood. Liebig's doctrine of fermentation is, that ferment of yeast is nothing but vegetable fibrine, albumen, or casein in a state of decomposition, with their particles in a state of intestine motion. This motion being communicated to the particles of the vegetable, or of the animal matters with which the ferment is in contact, will, other circumstances being favorable, communicate the same kind of intestine movement to them, and thus split up their particles into new and less complex compounds. The gluten, or other azotised matters in the fluid, act therefore the part of fresh ferment.

Liebig elsewhere states, that animal fibrine, albumen, or casein may act as a ferment as well as vegetable. The poison of scarlatina having passed into the blood in perhaps an almost unappreciable quantity, multiplies itself within the body in a manner analogous to a ferment, until the whole of the pabulum in the blood that enables it thus to multiply itself, is consumed. Should there be no pabulum in the blood, no reproduction of the poison could ensue, nor could any of the ordinary effects of scarlatina occur, unless the quantity of the virus absorbed was sufficiently great to attack any membrane that had not been previously affected, or in which the change previously made had not been effaced by the tendency existing in all altered diseased tissues to revert to their normal state. The nonsusceptibility of the patient to the subsequent action of the virus, is ordinarily attributed to this modification of the blood; but for reasons to be hereafter stated, I do not consider this to be the sole cause of it. The second distinction between the mineral and vegetable and the morbid poisons, namely, that the effects of the latter do not depend to any great extent on the dose of the poison, follows as a necessary result of the preceding law; for, if the amount of the virus circulating in the blood is ordinarily in proportion to the quantity of matter in the blood fit for its reproduction, it follows necessarily that the resulting disease will depend, not so much on the dose of the poison, as on the amount of pabulum then existing in the blood for its increase.—*Braithwaite's Retrospect and Med. Times.*

ART. V. — *Treatment of Intermittent Fever by Tartar Emetic.* By — MOORE, Esq., Assistant Surgeon, Upper India.

[Mr. Moore has treated a great many cases of intermittent fever in one of the Indian regimental hospitals, and he gives it as the result of his experience, that tartar emetic is preferable to any other medicine hitherto employed in this disease. He says:—]

Tartar emetic has been administered in nauseating doses, prior to the first stage of the fever, or the stage of invasion. It has been continued during the second or hot stage,—the stage of excitement. It has been continued during the third or sweating stage—the period of the fever's crisis and decline.

The exhibition of tartar emetic in the treatment of intermittent fevers has been deferred until the bowels have been freely purged by pills or powders of calomel and jalap, followed by the common mixture of senna and Epsom salts. This preparatory evacuation of the bowels by calomel, jalap, or by some other equally active purgatives, has been invariably observed. It is a standing order in the regimental hospital. When it has been ascertained that the intermittent fever is not complicated with inflammation of the viscera of the throrax and abdomen, the lancet, leeches, and the cupping instrument, are kept in reserve until such inflammation becomes developed. These preliminary steps taken, the administration of tartar emetic is commenced after the first paroxysm of the fever has clearly declared itself; the proportionate doses of the medicine for each patient during the progress of the fever being regulated by mixtures marked, A, B, C. D. E, of which an ounce every half hour or every hour is a dose. A contains one grain of tartar emetic to one hundred ounces of water. B one grain to fifty ounces. C one grain to twenty ounces. D one grain to ten ounces. E one grain to five ounces.

The advantages to be derived from regulating the doses of tartar emetic in this manner, consists in having the means at hand to keep the patient's system under the influence of the tartar emetic, without producing any violent effects on the stomach and bowels either by vomiting or purging. The chief object to be kept in view is, to prostrate the patient's strength so completely, that when the first stage of the fever, or the stage of invasion, has commenced, it must work on the patient's system, debilitated by the nauseating doses of the tartar emetic. In like manner the prostration of the patient's system is kept up during the progress of the second and third stages of the fever.

The value of tartar emetic as a remedial agent in uncomplicated intermittent fevers consists in anticipating the fever by prostrating the patient's system previous to the first stage, or the stage of invasion, setting in. In this respect tartrate of antimony and potash possesses advantages over all other medicines classed as emetics. The patient's system once brought under the influence of the medicine, can be kept in a state of extreme prostration by the administration of decimal and centesimal subdivisions of a grain repeated at short intervals without the effects of vomiting and purging being produced.

The centesimal subdivision of one grain of tartar emetic is more suited for children and weekly females than adult males. On this account the mixture has been introduced into the list. When so small a quantity of tartar emetic fails in producing any effect on the system, mixture B, or the fiftieth part of a grain of tartar emetic, can be substituted. The mixture most frequently used in the regimental hospital of the 5th infantry is that marked D in the list, or the decimal subdivision of a grain repeated every hour. The quantity of the tartar emetic can be increased or diminished by changing the mixture, and by shortening or lengthening the intervals of time at which each dose is given.

In three-fourths of the patients thus treated with tartar emetic, the attacks of intermittent fever, if not cut short at once, have been modified. Except in very obstinate cases, each recurring paroxysm has exhibited fewer marks of the acute form of the disease; and in point of duration, each stage of the fever has undergone a modification. In the simple uncomplicated form of intermittent fever, blood-letting has never been prescribed, nor has bark in any form been ordered. In cases of intermittent fever complicated with congestion and inflammation of one or more of the internal viscera, the lancet, leeches, and cupping have been freely resorted to in order to aid the effects of the tartar emetic. Occasionally it happens that if the duration of the fever — quotidian, tertian, quartan — be protracted, the patient's system becomes habituated to the tartar emetic. A mixture in which half a grain of tartar emetic has been ordered every hour has failed to produce the effect of prostration, vomiting, purging or sweating.

Under these circumstances it is useless to persist in prescribing tartar emetic. The medicine must be omitted. The loss of its influence in prostrating the patient's strength, and in arresting the fever during its different stages, is but temporary. Twelve or fifteen leeches ought to be applied to the epigastrium and over the liver; or, the quick abstraction of fifteen ounces of blood from the epigastric and hypochondriac regions, by means of two or three cupping glasses applied at the same time, should be reserted to. This mode of local depletion is preferable to the application of leeches. Calomel and antimonial powder, five grains of each; or calomel and James' powder, in the same quantities, given at bed-time; and on the following morning a purgative draught, or purgative mixture, into which compound jalap powder enters, may be prescribed every fourth hour, until free avacuations from the bowels have been produced. Farther treatment of the disease is suspended until a fresh paroxysm of the fever has distinctly declared itself. The tartar emetic is then resumed, and prescribed in the decimal subdivisions of a grain, as in mixture D. This temporary suspension of the tartar emetic, and change in the treatment, has generally succeeded in producing favorable results.

Tartar emetic is a medicine well worthy of an extensive trial in the treatment of intermittent fever. Unaided, it has seldom played false in subduing the uncomplicated form of intermittent fever, however severe. Aided by the lancet, by cupping or by leeches—aided also by mercurial purgatives—it has seldom failed in its duty, to either patient or physician, in cases of intermittent fever complicated with congestion and inflammation of one or more of the internal viscera.

I do not recommend tartar emetic as an *anti-periodic*. So frequently have I been deceived by the anti-periodic virtues said to exist in a certain class of medicines, that I confess myself a sceptic as to any such qualities being inherent in medicine. Quinine, bark in powder, and bark in decoction, administered in small and large, and frequently in repeated doses, have failed to check the onset of the fever, or to modify its symptoms. A single dose of Epsom salts has converted a quotidian into a tertian fever; a tertian into the quartan type. Under such circumstances, to which of these medicines ought we to attribute the virtues of anti-periodicity? But to the value of tartar emetic as a *remedial agent* in the treatment of intermittent fever, the results of more than 300 cases discharged cured, from the Regimental Hospital, 5th Infantry, Gwailor contingent; the result, also, of cases treated under my orders, as Civil Surgeon in charge of the district of Kuchwahargar, in 1847; and at present in charge of the district of Chundeeree, bear sufficient evidence.—*Ibid., and Med. Gaz.*

ART. VI. — *Infantile Typhus.* By Dr. FRIEDLEBEN.

Dr. Friedleben has given, in the *Archiv fur Physiologische Heilkunde*, the results of his experience of four epidemics of infantile typhus: the first extending from February to April, 1844, and from July to August in the same year. Then in January and February, 1846, and during July and August of the same year. During the months of January and February, 1846, typhus was confined almost exclusively to children, affecting the adult more particularly during April and May. In the course of the three years 1844, 1845, and 1846, the Doctor had under his charge 1342 children (880 boys, and 962 girls,) of which 98 cases were typhoid, to wit, 46 boys and 52 girls. Among these, only one was under one year, 23 ranged from two to five, 32 from five to eight, 22 from eight to eleven, 12 from eleven to fourteen, and 8 above fourteen. The endemic, therefore, fell with its greatest force on children between the second and eleventh years; and was more prevalent in winter and summer than in the autumn and fall.

The pathological character of this disease is detailed with great fidelity, and all the organic derangements of the intestinal canal, the lymphatic glands, the liver, the spleen, the kidneys, as well as of the circulating and respiratory system, and of the brain, are faithfully described.

The glands of Peyer were much swollen; some of them being a line and a half in thickness. The swelling was not, however, always uniform — the centre being frequently more elevated than the margins. Their surface was unequal, owing to the presence of capsules, which gave them the appearance of ulceration. The number of the diseased glands varied from six to twenty. They were of a bluish-livid tint, soft and easily detached. No change seemed to have occurred in the other coats of the intestine, with the exception of the subglandular cellular tissue, which presented the appearance of softening. Such were the ap-

The centesimal subdivision of one grain of tartar emetic is more suited for children and weekly females than adult males. On this account the mixture has been introduced into the list. When so small a quantity of tartar emetic fails in producing any effect on the system, mixture B, or the fiftieth part of a grain of tartar emetic, can be substituted. The mixture most frequently used in the regimental hospital of the 5th infantry is that marked D in the list, or the decimal subdivision of a grain repeated every hour. The quantity of the tartar emetic can be increased or diminished by changing the mixture, and by shortening or lengthening the intervals of time at which each dose is given.

In three-fourths of the patients thus treated with tartar emetic, the attacks of intermittent fever, if not cut short at once, have been modified. Except in very obstinate cases, each recurring paroxysm has exhibited fewer marks of the acute form of the disease; and in point of duration, each stage of the fever has undergone a modification. In the simple uncomplicated form of intermittent fever, blood-letting has never been prescribed, nor has bark in any form been ordered. In cases of intermittent fever complicated with congestion and inflammation of one or more of the internal viscera, the lancet, leeches, and cupping have been freely resorted to in order to aid the effects of the tartar emetic. Occasionally it happens that if the duration of the fever — quotidian, tertian, quartan — be protracted, the patient's system becomes habituated to the tartar emetic. A mixture in which half a grain of tartar emetic has been ordered every hour has failed to produce the effect of prostration, vomiting, purging or sweating.

Under these circumstances it is useless to persist in prescribing tartar emetic. The medicine must be omitted. The loss of its influence in prostrating the patient's strength, and in arresting the fever during its different stages, is but temporary. Twelve or fifteen leeches ought to be applied to the epigastrium and over the liver; or, the quick abstraction of fifteen ounces of blood from the epigastric and hypochondriac regions, by means of two or three cupping glasses applied at the same time, should be reserted to. This mode of local depletion is preferable to the application of leeches. Calomel and antimonial powder, five grains of each; or calomel and James' powder, in the same quantities, given at bed-time; and on the following morning a purgative draught, or purgative mixture, into which compound jalap powder enters, may be prescribed every fourth hour, until free avacuations from the bowels have been produced. Farther treatment of the disease is suspended until a fresh paroxysm of the fever has distinctly declared itself. The tartar emetic is then resumed, and prescribed in the decimal subdivisions of a grain, as in mixture D. This temporary suspension of the tartar emetic, and change in the treatment, has generally succeeded in producing favorable results.

Tartar emetic is a medicine well worthy of an extensive trial in the treatment of intermittent fever. Unaided, it has seldom played false in subduing the uncomplicated form of intermittent fever, however severe. Aided by the lancet, by cupping or by leeches—aided also by mercurial purgatives—it has seldom failed in its duty, to either patient or physician, in cases of intermittent fever complicated with congestion and inflammation of one or more of the internal viscera.

I do not recommend tartar emetic as an *anti-periodic*. So frequently have I been deceived by the anti-periodic virtues said to exist in a certain class of medicines, that I confess myself a sceptic as to any such qualities being inherent in medicine. Quinine, bark in powder, and bark in decoction, administered in small and large, and frequently in repeated doses, have failed to check the onset of the fever, or to modify its symptoms. A single dose of Epsom salts has converted a quotidian into a tertian fever; a tertian into the quartan type. Under such circumstances, to which of these medicines ought we to attribute the virtues of anti-periodicity? But to the value of tartar emetic as a *remedial agent* in the treatment of intermittent fever, the results of more than 300 cases discharged cured, from the Regimental Hospital, 5th Infantry, Gwailor contingent; the result, also, of cases treated under my orders, as Civil Surgeon in charge of the district of Kuchwahargar, in 1847; and at present in charge of the district of Chundeeree, bear sufficient evidence.—*Ibid., and Med. Gaz.*

ART. VI. — *Infantile Typhus.* By Dr. FRIEDLEBEN.

Dr. Friedleben has given, in the *Archiv fur Physiologische Heilkunde*, the results of his experience of four epidemics of infantile typhus: the first extending from February to April, 1844, and from July to August in the same year. Then in January and February, 1846, and during July and August of the same year. During the months of January and February, 1846, typhus was confined almost exclusively to children, affecting the adult more particularly during April and May. In the course of the three years 1844, 1845, and 1846, the Doctor had under his charge 1842 children (880 boys, and 962 girls,) of which 98 cases were typhoid, to wit, 46 boys and 52 girls. Among these, only one was under one year, 23 ranged from two to five, 32 from five to eight, 22 from eight to eleven, 12 from eleven to fourteen, and 8 above fourteen. The endemic, therefore, fell with its greatest force on children between the second and eleventh years; and was more prevalent in winter and summer than in the autumn and fall.

The pathological character of this disease is detailed with great fidelity, and all the organic derangements of the intestinal canal, the lymphatic glands, the liver, the spleen, the kidneys, as well as of the circulating and respiratory system, and of the brain, are faithfully described.

The glands of Peyer were much swollen; some of them being a line and a half in thickness. The swelling was not, however, always uniform — the centre being frequently more elevated than the margins. Their surface was unequal, owing to the presence of capsules, which gave them the appearance of ulceration. The number of the diseased glands varied from six to twenty. They were of a bluish-livid tint, soft and easily detached. No change seemed to have occurred in the other coats of the intestine, with the exception of the subglandular cellular tissue, which presented the appearance of softening. Such were the ap-

pearances noticed in cases which proved fatal before the twenty-third day. When disease was protracted beyond that period, induration of the glands occurred.

According to the opinion of the author, all the glands which became developed before the twenty-first day were the soft; those later, the hard. His observations established the views of MM. Rilliet and Barthez, as also those of Barrier, on the progress of inflammation of the glands. Severe ulcerations of these may occur in exceedingly young subjects; they were witnessed in a case only two years and a half old. They may take place at a very early period, even on the eighth day, but cicatrization does not begin before the twenty-first day; its progress is found to be more rapid than in adults.

The mucous membrane is usually sound, being changed in appearance only in the immediate vicinity of the glands. In one instance, the mucous membrane of the stomach was observed to be inflamed. The sub-mucous cellular tissue was always natural. Changes are invariably discovered in the mesenteric glands; they are usually red and swollen, particularly at the beginning of the disease; infiltration and softening are rare: and, in the opinion of the author, the former only occurs in very serious cases, where there has been disorganization of the condition of the blood.

The general conclusions are as follows: —

1. The glands of Peyer, and as a consequence the mesenteric, are the local seat of infantile typhus.
2. During the first three weeks there is only simple inflammation of the follicles (plaques molles.)
3. This may terminate in resolution without ulceration; when this takes place, it gives rise to the first form mentioned in the paper.
4. The progress of the cicatrization of these ulcers is very rapid.
5. When the morbid action extends beyond the twenty-first day, infiltration of the glands of Peyer may occur (plaques dures.)
6. The infiltration begins in the glands in the proximity of the great intestine.
7. This leads necessarily to ulceration, constituting the second form of ulceration.
8. Cicatrization takes place very slowly in these last.
9. After the twenty-first day, the two modes of ulceration may be discovered united together.
10. In all the cases terminating favorably, and in the generality of those ending in death, the mesenteric glands are only affected by a simple inflammatory softening.
11. The changes of the spleen are simultaneous with those above described.
12. All the complications which happen before the twenty-first day are of a very distinct inflammatory character.
13. The chemical character of the blood agrees with that state.

Hence the corollary is obvious, that infantile typhus for the first three weeks consists essentially in follicular inflammation of the intestines, which readily admits of cure, and is essentially distinguished from the typhus of adults.—*Am. Jour., and Med. Times.*

ART. VII. — *Effects of Chronic Arteritis.* By BRANSBY B. COOPER, Esq., F. R. S.

[One of the most common effects of chronic inflammation of arteries is thickening of their coats, which by impairing their elasticity, is no doubt a frequent cause of rupture of the inner coat, and the consequent formation of aneurism. Further:]

A thickening of the valves of the aorta, in all probability proceeding from chronic inflammation, is very frequently met with; they are sometimes converted into a kind of ligamentous tissue, and thus become completely unfitted for their original important office. This thickening sometimes goes on to such an extent as to create wart-like excrescences, which Corvisart terms "vegetations."

Chronic inflammation sometimes produces atheromatous deposits between the internal and middle coats of an artery, forming projections into the canal so as materially to interfere with the flow of blood through the vessel. It has lately been proved by means of the microscope, and by chemical analysis, that these morbid growths consists of fatty matter, and therefore steatomatous deposit would perhaps be an appropriate term for the disease. The obstruction offered in this disease to the circulation of the blood, often produces distension of the vessel above the deposit, and in some cases becomes an exciting cause of aneurism. These deposits are not by any means uncommon, as the numerous preparations in our hospitals serve to prove; its diagnosis during life is very difficult, unless it be situated where auscultation can be employed in the investigation, as in the aorta; in that case a bruit would be present from which the true cause of the obstruction could generally be conjectured.

Bony deposits also frequently result from the effect of chronic inflammation; and, indeed, this deterioration is so common in the arteries of old people, that it must be regarded, properly speaking, as a change inseparable from senescence, and not as disease. The cause of this action is probably to be traced to a diminution in the power of the capillaries of the bones to eliminate phosphate of lime from the blood: an undue quantity of that earthy matter being therefore carried into the circulation, it is deposited in the more vital parts of the system. Under certain diseased conditions young persons are liable to the formation of these deposits of bone-earth, or ossification of arteries as it is termed.

A frequent result of ossification of the arteries, especially when it occurs in the lower extremities, is sphacelus of the limb, in consequence of the imperfect nutrition which the rigid arteries are capable of supplying to parts distant from the heart; it is therefore very desirable to prevent wounds of the toes or extremities in old people, and also to maintain, by topical means, the normal temperature in the limbs. Ossified arteries are liable to disruption; the vessels of the brain sometimes give way under these circumstances, inducing coma, to which, I think, the term "senile apoplexy" may be aptly applied.

The presence of ossification of the arteries may be diagnosed, particularly in old people by the irregularity of the circulation, and, when the

vessels of the extremities are affected by the tangible rigidity of the diseased vessel. Ossification of the coronary arteries of the heart produces a train of symptoms which constitutes the well-known disease termed "angina pectoris." Gouty and rheumatic diatheses seem to be especially liable to morbid depositions in the arteries; it is therefore highly important, in acute attacks of rheumatism or gout, to entirely subdue the specific action as early as possible, so as to prevent it from passing into the chronic form, under which there is always considerable tendency to the various depositions I have described, all of which are more or less likely to produce aneurismal dilatation.—*Braithwaite's Retrospect, and Med. Gaz.*

SURGERY.

ART. I.—*Operation of Transfusion of Blood.* By Dr. C. H. F. ROUTH, Physician to the St. Prancas Dispensary.

[Dr. Routh has collected together all the recorded cases in which transfusion was performed, and from these data has come to conclusions very favorable to the performance of the operation. After enumerating the cases, he observes:]

From this list we conclude—1st, That the operation is one of the safest major operations which may be practised in surgery.

The total number of cases here given are 48; the number of deaths, 18; giving a rate of mortality of 1 in 3—rather less than that of hernia, or about the same as the average of amputations, according to some authors. A very little consideration, however, of the table will satisfy us that the average is too high. In all these 48 examples, it is true, the operation of transfusion was performed, but in some inadequately, and in others, where there was no reasonable hope of deriving any benefit from it. In other of the cases, death was certainly due to other causes than the operation.

1. In cases 5, 6, 12, and 16, the patients were *already dead* when the operation was performed. 2. In case 8, as will be more especially noted in the sequel, enough blood was not transfused. 3. In cases 7, 9, 15, 21, and 48, there was other mortal disease present: so that, although at first some benefit resulted from the operation, this good effect was but transitory. 4. In case 44 the operation was unfortunate, air having been inadvertently admitted into the veins. And lastly, in cases 45, 46, and 47, the same objection applies as in case 8.

Thus, out of these 18 deaths, we have only 4 in which death can be reasonably attributed to the transfusion, i. e., out of 34 cases in all we have only four deaths, or 1, in 8½.

This result, however, is scarcely correct, though it accords with that obtained by Mr. Peet. This gentleman, in a paper read before the University College Medical Society, now unfortunately lost, but an abstract of which appears in the Lancet, (1842,) came to the following conclusions. He collected 35 cases where transfusion had been performed. Of this number 13 died—an average mortality of 1 in 2·7. But he also remarked, that this result was incorrect, as among the fatal cases in 3

only could death be referred to a failure of transfusion, giving thus a total of 25 cases, of which 3 only were fatal, or 1 in 8·3. I do not think, however, that the four first cases given in the Table should be included in this average. The accuracy of the record of these may and has been disputed; but, moreover, as the operation in these cases, excepting in the last, was not performed upon diseased persons, the facts only go to prove that transfusion, and that even with the blood of animals of a different species, may sometimes be practised upon comparatively healthy persons with impunity. Excluding, therefore, these 4 cases, we have 30 cases, of which 2 only were fatal, or 1 in 10. This is a highly favorable result; more so, indeed, than that obtained in the other major operations, if we except that in lithotomy, by Sacerot.

2. In reference to the diseases in which the operation has been performed. *a.* In uterine hemorrhage. The result is very flattering. It was performed in twenty-four such cases. In five the patient did not recover. In one only, however, could the operation be reasonably stated to have failed. In two cases (Nos. 5 and 12) death had already occurred. In one (8) sufficient blood could not be obtained. In another (44) air was accidentally admitted into the vein. In one only the benefit produced was transitory, and it failed (35.) In four cases the hemorrhage was secondary, coming on and continuing for some days after delivery. In all these it proved successful. (Cases, 13, 34, 41, 43.) In 2 cases the operation was performed before labor, and in both with a happy result. *b.* After surgical operations, transfusion was performed 7 times (6, 20, 21, 28, 22, 36, 42), in three cases only proving fatal (6, 20, 21.) In two of these fatal cases, however, (6 and 21,) death is accounted for by other causes. In both these cases the operation was performed for secondary hemorrhage. The absence of a post mortem in case 20, prevents the same conclusion in regard to the cause of death being stated with any degree of certainty. *c.* It was twice performed in the state of exhaustion following continued dyspepsia. In one it was fatal, but the post mortem here revealed organic disease, scirrhus of the pylorus. The other case was certainly cured by the operation. *d.* It proved successful in one case, under the most unfavorable circumstances. In a case of phthisis, with violent hæmoptysis; and this is the more interesting, as the blood of *ram* was the fluid used in this case. The quantity, however, transfused was small, olny 6 oz. It is, however, a fact of some interest; the more so, if taken in connexion with the cases 1, 2, and 4, where sheep's and calf's blood were employed; and must be looked upon as an instance of the power of the "*vis medicatrix naturæ*," where a patient got well in spite of the remedies employed, or as confirmatory of Dr. Harwood's experiments, and opposed to those of Drs. Blundell, Dieffenbach, &c. *e.* It proved of no avail in one case of hydrophobia, and another of asphyxia. *f.* It proved fatal in 3 out of 4 cases of Asiatic cholera. In the 4th it probably exerted a beneficial effect: probably that effect might have been permanent, but for the existence of other organic and mortal disease. In the other 3 cases, the quantity transfused was insufficient. In cholera especially, where the amount of fluid that runs away by the bowels is so great, we should expect *a priori*, that no advantage could be derived

by the transfusion of a small quantity; the more so, as in those cases where injection of saline substances has been tried, as much as 100 oz., and 120 oz., and even upwards, have been transfused, with the best effect.

This view of the case obtains apparently confirmation, from a simple review of the history of the four cases in which it was tried. Life was prolonged in proportion as the quantity injected was large. In case 45 $1\frac{1}{2}$ oz. only were injected. He died in six minutes after the operation. In case 47, $2\frac{1}{2}$ oz. were injected; the patient died two hours after the operation. In case 46, 6 oz. were injected; the patient died in six hours after the operation. In case 48, 30 oz. were injected, and death resulted in sixty-six hours. In the two last cases, (46 and 48,) in the first, the cholera symptoms did not recur; in the last they were overcome. The injection of larger quantities in cholera derives confirmation from the following calculations.

3. As a rule, the quantity injected, where transfusion is practised, should not be under 7 oz. It is admitted, that a lesser quantity may, and has been successfully transfused. Thus, in seven cases in the table, a cure followed under these circumstances:—

In case	22	there were transfused 2 oz.	
"	23	- - - - - - - 2	
"	28	- - - - - - - 5	Mean 3·8 oz. Say 4 oz.
"	37	- - - - - - - 6	
"	38	- - - - - - - 4	
"	39	- - - - - - - 4	
"	40	- - - - - - - 4	

But, on the other hand, where the quantity transfused before any symptoms of rallying took place, is distinctly stated in the table, we have the following result:—

In case	10	there were transfused 6 oz.	
"	11	- - - - - - - 6	
"	13	- - - - - - - 6	
"	17	- - - - - - - 3	Mean 7·0 oz.
"	19	- - - - - - - 5	
"	26	- - - - - - - 8	
"	28	- - - - - - - 5	
"	31	- - - - - - - 12	
"	40	- - - - - - - 4	

Thus it is, that we explain the failure of the operation in case 8, 45, 46, and 47, a sufficient quantity not having been transfused. This result is still more certainly brought out in another table, where the fatal and successful cases, and the quantities transfused, are opposed for the purpose of making this more evident, arranged in separate columns, begining with the smallest mean quantity transfused in successful cases, one column being set apart for every additional 4 oz. up to 16. In this table, the 4 first cases and the 4 cases in which death had already occurred, when the operation was performed, are excluded:—from which it appears, that the greatest proportional number of successful cases are those in which a quantity of not less than 12 oz., or more than 16 oz.,

was transfused; the number of successful cases proportionally increasing up to this limit, and then diminishing again, giving a mean of 14 oz., as the quantity to be transfused.

The same result is brought out, though more generally, if we arrange these series of cases in two classes only; the one, where the quantity transfused was under 12 oz., and the other where it exceeded this number: *i. e.*, we have in the former class 8 deaths, with an average of 5·3 oz., transfused, and 14 rocoveries, with an average of 5·9 transfused, or 1 death to 1·7 (or nearly 2) recoveries, and in the latter class we have 3 deaths, with an average quantity 20·1 oz. transfused, and 9 recoveries, with an average 16·3 oz. transfused, or 1 death to 3·2 recoveries. From which we think it follows, that, as a rule, the quantity transfused should not be less than 6 oz., nor more than 16 oz.

4. In regard to the age of the patients in which this operation was performed, the data are insufficient in the fatal cases. In the 16 successful cases in which the age is given, the mean age, was 34·8. In three cases the age was under 30; in four, under 35; in five, under 40; and in three, under 42.

5. The danger of the operation is certainly not great. Among the successful cases, phlebitis, which *a priori*, we should most fear, occurred in only one case, case 37, where the blood was taken from a *ram;* but even in this case it was easily overcome. In the only three cases where we have seen, after transfusion, death followed, (cases 20, 35, and 36,) the operation could only be said to have failed to cure, but not caused death; and even in one of these, (case 20,) Dr. Blundell expressed an opinion that there was some other latent cause of death.

6. In regard to those diseases in which this operation might be performed, I think there are many in which, by reason of a mistaken timidity on the part of the practitioner, it has not been practiced; and where the probability is, that if the contrary course had been pursued, life might have been spared. Too much hardihood is certainly very blameable, but timidity is scarcely less so. The misfortune is, however, that death might be frequently improperly ascribed to the operation, if it failed, and more especially, as it might be improperly performed. With this state of public feeling, therefore, it can at present only be resorted to in extreme cases. We can, therefore, only speak of it as applicable in those diseases where collapse is present or imminent.

From the table we learn that out of the 18 cases in which it failed or proved fatal, (in five,) other organic disease was present. In only two cases where there was or had been organic disease, did it prove successful. While, therefore these figures do not absolutely forbid the employment of transfusion in organic disease, they very much discourage it. Common sense would necessarily contra-indicate its practice, especially in diseases of the lungs or heart. - - - - -

It remains only now to add a few words on the method of performing the operation itself, and I cannot better do so than in quoting the very words of my friend and colleague Mr. Walton, who has kindly furnished me with the following remarks on the subject: — "The operation

may be executed in three ways—1. By receiving the blood in a vessel, and allowing it to enter the body by gravitation. 2. By interposing a tube between the blood-vessels of the emittent and recipient persons, and trusting to the force of the circulation for the transmission. Both these methods have given place to the 3d or injecting process, which is effected by the stop-cock stomach pump; but, instead of the tube through which the pump would be filled, there is a funnel-shaped basin to receive the blood. Much nicety is required in its make.

So little is the theory of transfusion understood by instrument-makers in general, that instruments are made and sold for the purpose that are wholly inapplicable. Mr. Coxeter furnished me with mine. Mr. Ferguson, of Smithfield, has produced the most perfect one that I have seen. The basin should be cased like a hot plate, that it might contain water. The piston should fit acurately, and at the same time work freely. I think that an interruption by some elastic material in the tube that is to convey the blood, is advisable, for then the pipe that is inserted into the vein is less likely to be disturbed by any motions which may arise in the working of syringe or movements of the patient. At least three persons are required for the safe and efficient performance of the operation, and their attention should be wholly given to it. Supposing everything ready, the instrument quite clean, air-tight, and thoroughly warmed, the basin filled with hot water, a vein in the patient's arm should be punctured, and the finger applied to the orifice till the tube is ready to be inserted. It is quite unneccessary to dissect out a vein, and place a probe under it before making the puncture, as has been recommended. A vein in the arm from which the blood is to be taken, is next to be opened by a fine cut, and the stream directed into the centre of the basin, the arm being held close to it. When sufficient has entered, the syringe should be filled, and the piston pushed in a little till blood flows at the end of the pipe, which is then to be introduced into the vein. The injector now works the syringe till the desired quantity has been thrown in. There should be no cessation in the stream of blood entering the basin till the operation is ended, so that after each occasion of the syringe being filled, there may be at least an ounce of blood at the bottom of the basin, or else air would probably be sucked in. It will be perceived that I have given merely a hasty sketch, but sufficient, I think, to guide those who have no experience in the operation. The accident to guard against is the transmission of air. The greater facility with which this is likely to occur when transfusion is performed through the jugular vein, points out the impropriety of selecting this vein for the operation. It would be worse than useless to attempt to transfuse unless an expert bleeder be procured. Much of the success of the operation depends on the despatch, as well as the steady and uninterrupted course that is pursued; for, with the disadvantage of the blood travelling over dead surfaces, very little exposure of it to air must be apt to destroy vitality.

The above account has been given, as the subject of transfusion is usually excluded, in works even of Practical Surgery, although much simpler operations are treated in detail. Even Cooper's Dictionary 'is silent on the subject.' "—*Braithwaite's Retrospect, and Med. Times.*

ART. II.—*Multilocular Ovarian Cyst, weighing forty pounds, successfully removed by operation.* By Mr. F. ELKINGTON.

Mr. F. Elkington communicated an account of this case to the Birmingham Pathological Society. The subject of it was a dressmaker, aged 31 years, married 15 months.

General Appearance.—Tall, thin and anæmic. First menstruated when 17 years of age, and continued regular and in good health till about two months before she was married. During the two months preceding her marriage, she was unwell every fortnight; sometimes very weak, and for several days each time; in fact, she was scarcely ever free from a discharge. This continued for six weeks after her marriage. A few weeks before, she had pain in the right side, "like a stich." About three months after her marriage, she began to increase in size, and first of all in the left side. In about one month from this time, (being four after her marriage,) she increased rapidly, being "unwell" every week, and for five days at a time. During the last three or four months she has been "regular," menstruation occurring only once in the month, but continuing so for five days each time. The discharges were dark coloured, frequently coagulated, and smelling badly. Her general health and appetite have been good; she has seldom been sick. There is no increase in the breast except when she is going to be "unwell." Has difficulty in making water, and passes but little; bowels regular. There is complete prolapsus uteri, which commenced about six months ago; at times, it is the size of her hand. Can lie on either side, but better on the left. When the swelling began, she could not lie on either side; tongue furred and swollen; pulse slow and weak. She has consulted two surgeons, who said she was pregnant.

Examination of the Abdomen.—She is as large, or nearly so, as a woman at the full period of utero-gestation. The tumour is very movable, irregular, and nodulated: there is distinct fluctuation, varying in its character at different points. The breasts are small, and there is no areola around the nipples. The stethoscope being applied over the abdomen, no "bruit" could be heard in any part of the tumour.

Examination per Vaginam.—After replacing the uterus, there could be felt no enlargement of that organ.

Diagnosis.—Ovarian tumour of the left side, of the multilocular form. She gradually increased in size, and about Christmas, or in January, 1849, measured forty-five inches round her. She now began to suffer very much from the great size and dragging of the tumor; her breathing was much embarrassed. She was tapped February 28th, 1849. The trocar was introduced through the linea alba, about three inches below the umbilicus. After a quart of thick fluid had been drawn off, no more flowed. A probe was then passed along the canula, when I found that the cyst was emptied, and that the point of the probe was pressing against another cyst. The trocar was again introduced, pushed on, and another cyst opened. At first there was scarcely any escape of fluid; but, after repeatedly passing a probe along the canula, the contents of the cyst slowly ran off. We succeeded in drawing off about five

or six gallons of thick, ropy, albuminous fluid. The second cyst having been emptied, it was found that the size of the tumour had reduced only about two-thirds, and that there was still several other cysts, but it was not thought advisable to empty them. In a few days she was convalescent. She again very rapidly increased in size, and in less than a month was as large as ever. Having made up her mind to submit to ovariotomy, I was requested to operate. She was made fully aware of the importance and great risk of the operation. It was performed in the presence and with the assistance of Dr. Clay, Mr. Fletcher, Mr. Dehane, and several friends.

An incision of about twelve inches in length was made through the abdominal parietes, and, after separating two or three slight adhesions, it was found necessary to diminish the size of the tumour before it could be got through the opening. The pedicle, which was very broad and vascular, was divided into two parts, and each tied with a very strong ligature. The tumour weighed forty pounds. She recovered rapidly; in fact, she had not a single bad symptom. The wound was entirely healed, with the exception of the lower part, where the ligatures passed out, in seven days. The first ligature came away on the eighteenth day, and the second on the twenty-first day. She was down stairs a few days after, and is now to all appearances perfectly well.—*Am. Jour., and Prov. Med. and Surg. Journal.*

ART. III. — *Successful Case of Ovariotomy by the large Abdominal Section.* By JOHN CROUCH, Esq.

The subject of this case was an unmarried female 24 years of age, of "healthy habits and appearance." Her abdomen first began to enlarge in 1847, and in May, 1849, Mr. C. drew off with a trocar, seven pints of a coffee-coloured fluid, of a serous character, and highly charged with albumen. The irregularity of the tumour could now be more distinctly perceived, and on the right side of the umbilicus, a hard, solid substance could be traced, the diameter of which was five or six inches from side to side, and still more than that from above downwards. Of course it was impossible to ascertain the extent of the tumour below, as it would naturally by its own gravity descend into the cavity of the pelvis. The substance was quite movable above, except for an inch or two anteriorly opposite the denser part. The patient was made to lie on one side, and the tumour being grasped by both hands, and brought forwards from the spine, it was thought to communicate the feeling, that it had contracted no adhesions to the viscera posteriorly, and the fingers could be passed almost *behind* the cyst.

The nature of the case having been explained to the patient, and she desiring an operation, it was performed on the 9th of July, in the following manner:—

Having marked out with a camel-hair brush, and iodine paint, five transverse lines across the linea alba, for the insertion of sutures, I commenced an incision into the skin and cellular membrane, about three inches above the navel, and extended it to the length of nine inches, towards the pubis, avoiding the umbilicus by about half an inch. I

then opened the peritoneum midway between the umbilicus and pubes to the extent of an inch. The character of the tumour being now ascertained, I quickly extended the opening of the peritoneum to the length of the external incision. A large white cyst now partly protruded itself through the opening, evidently the one that had been previously tapped. On making an incision into it, about five pints of the same kind of coffee-coloured fluid as before were let out; and these had collected in as many weeks. Four other separate cysts were then punctured, each containing from half a pint to a pint of fluids of different colours and consistencies. This reduced the tumour to about one third of its original size, and enabled us easily to examine its connections and the condition of the surrounding viscera. The only adhesion that existed was between the solid part of the tumour in front, and the abdominal parietes, midway between the umbilicus and the right cyst of the ilium, to the extent of two square inches. This adhesion was easily divided with a blunt bone knife. A great number of small cysts were found closely impacted into the cavity of the pelvis; on raising these, Dr. Surrage pronounced the uterus and the right ovary to be in a perfectly healthy condition. The pedicle of the tumour was then easily discovered, and was situated, as predicted, in the left broad ligament of the uterus. Its thickness, when pressed together, was not greater than a middle-sized finger.

A suture-needle, armed with a double thread of very strong ligature twine,* was then made to pierce the centre of the pedicle near its uterine extremity, and the needle being cut off, two of the four ends were tied very tightly in opposite directions, as in the operation for the cure of a nævus. This was done in two different parts of the pedicle. Four of the eight strings were then cut off, and the other four were placed at the lower end of the external incision. The tumour was now excised. The tying of the pedicle was the most painful part of the operation, and the only one of which my patient complained.

The external incision was then accurately brought together with five interrupted sutures. To obtain this accuracy, the iodine paint lines, suggested by Mr. Sandford, answered remarkably well. A narrow compress of linen was placed on each side of the wound, and long broad straps of adhesive plaster was carried from the back and loins of one side over the incision, to the back and loins of the other side, from the epigastrium to the pubes. A roller was not applied around the bowels, as it was deemed inconvenient to remove, but a small toilet table-cloth was carefully pinned, in imitation of the "Dublin obstetric binder," so as to afford equal support to the whole abdominal parietes, and that without the power of slipping. This application, suggested by Mr. T. G. Stockwell, was found very convenient and serviceable, both here and in the after treatment of the case.

The whole operation occupied twenty-three minutes, and was performed without the loss of an ounce of blood. The patient was then carefully placed in her bed, complaining of pain in her left side only,

*This twine was composed of a superior quality of hemp, and would support a weight of thirty-six pounds.

opposite the part where the pedicle was tied; pulse 80; skin warm and moist; no hemorrhage. A grain of the acetate of morphia was given in the form of a pill.

The case progressed favorably, and by the seventeenth day the patient was quite well. One of the ligatures of the pedicle came away on the eighteenth, and the second on the nineteenth day after the operation, and the remaining two on the thirty-third day.

The weight of the solid part of the cyst was nearly four pounds; its circumference was not less than eighteen inches, and must have required an incision of nine inches for its easy removal. The fluids measured nine pints, making altogether, solid and fluid, nearly fourteen pounds. The number of separate sacs was not fewer than *two hundred*. The larger ones contained a serous fluid, like that obtained at the first tapping; some of the smaller ones were filled with a glairy liquid, like white of egg; and a third set afforded a thick semi-solid substance, like dough or peas-pudding. The whole mass of cyst, when emptied of its contents and distended with tow, measured at its largest diameter, thirty inches, and at the smaller part nearly two feet. The shape of the tumour is very irregular and difficult to describe. At the lower part, a mass of cyst projected from the rest of the tumour, forming the part which filled the cavity of the pelvis. Two large arteries accompanied the enlarged Fallopian tube to its fimbriated extremity, and then meandered over the whole cyst.—*Ibid.*

Art. IV.— *Vascular Tumours at the orifice of the (female) Urethra.* By H. B. Norman, Esq., Surgeon to the Marylebone General Dispensary, &c.

[In addition to his own observations upon the subject of these tumours, Mr. Normal gives an able *resume* of the opinions of various authors who have previously described them. He gives the following description by Sir Charles Clarke:]

"The tumour," he says, "is *seldom firm;* of a florid scarlet color; if violence be offered to it, blood of the same color is effused: it is somewhat *granulated,* exquisitely tender; appears on accurate examination to shoot from the inside of the urethra; seldom acquires a large size; its attachment is slight, and it is so movable as to appear almost like a detached body lying upon the part. It gives rise to great suffering during micturition, and to a vaginal discharge. It is common to the married and the unmarried, most frequent in the young." The tumour was never seen by Sir Charles Clarke "in a person above the middle age." He notices that a similar kind of disease existed occasionally "in the interior of the canal, giving rise to the symptoms of tenderness on pressing the urethra, and a general swelling of the part;" and refers to such a case successfully treated by Sir James Earle, by means of large bougies.

In the most systematic works on diseases of the genito-urinary organs, and especially in those which treat of the female organs, these tumors are described; and in those published since Sir Charles Clarke's work, the name given by that author is adopted.

Thus Burns says:—"Excrescences may, notwithstanding the opinion of Morgagni, form in the course or about the orifice of the urethra, and generally produce great pain, especially in making water, on which account the disease has been sometimes mistaken for a calculous affection. The agony is at times so great as to excite convulsions; and it is not uncommon for the patient to have an increase of her sufferings about the menstrual period. The tumour is vascular, florid, movable, and exceedingly tender. When excrescences grow about the orifice of the urethra, they are readily discovered; but, when they grow high up, it is much more difficult to ascertain their existence." Dr. Baillie says "they cannot be known but by the sensation of a catheter passing over a soft body." Burns refers to many interesting cases, hereinafter to be cited. The late Dr. David Davis makes mention of these tumours, and gives a most interesting and complicated case in illustration. Sir B. Brodie limits their size to that "of a pea, or horsebean." He has met with many instances of them.

Dr. Ashwell thus treats the subject:—"This is by no means an unfrequent affection of the mucous membrane of the urethra. It usually attacks the young, whether married or single; is very rarely seen after the cessation of the menses; consists of a small *granular* tumour, generally pediculated and movable, attached to one part of the margin of the meatus, or just within the urethra, *whose two prominent characteristics are great vascularity and exquisite sensibility.* Sometimes these growths are not immovable, but appear like several raised coalesced granulations, or occasionally two or more isolated independent ones may be seen near together. Every now and then they extend partially along the urethra, and may even be located at the neck of the bladder. They are covered by a delicate *pale* mucous membrane, which is broken on being touched during examination, and blood exudes from the soft, feeble, and injected capillaries. . . . . If they interrupt or come in contact with the stream of urine, the act of passing water causes intense pain, and this is usually the first and most constant symptom of the complaint. After a time the urethra and bladder becomes irritable, and the frequent desire to micturate is suppressed by the dread of the pain which it excites. Sexual intercourse is intensely painful, and is therefore obliged to be suspended. Walking exercise is attended with suffering, and in fact any movement of the vulva, by slightly displacing or pressing upon the growth, produces instant pain. Leucorrhœa, and various sympathetic pains of the pelvis, &c., are mentioned as accompanying the tumour.

Mr. Safford Lee has met with these tumours "in the young and old." The largest example he had seen (as large as a date) was in a woman above forty; and he had one under treatment much older. He notices the occasional participation of the nymphæ in similar disease, its occasional extension along the urethra to the bladder, and also that the tumour is frequently divided at its extremity. Amongst the symptoms to which the tumour gives rise, he says, "One patient I saw had pains down the inner side of the thighs to the knees; and Professor Simpson told me of one case where pains in the soles of the feet were complained of."

Boivin and Douges describes them as "fungoid tumours," occasioning great inconvenience in micturition—formed on the meatus, the borders of which orifice concur irregularly to their formation, rounded, though often granulous, varying in size from that of a pea to a cherry. It will be seen that the urinary passage of the female is, in its whole extent from the external orifice to its termination in the bladder, liable to become the seat of excrescences, and that though the orifice is the most frequent seat of these growths, they are not very uncommon in the interior of the canal.

Though entitled to one common appellation, from their vascularity, they differ much in some other respects. Thus, in size, they may vary from a simple large granulation to a tumour as large as a date, or as a turkey's egg; in consistence, from something scarcely exceeding the solidity of jelly, to a considerable degree of firmness; in external surface they may be perfectly smooth or granulated; in form flattened and sessile, rounded, and growing irregularly from the whole margin of the meatus, or pediculated and pendulous; sensitive to the highest degree, or as in one instance not even sensible. Their sensibility bears no relation to their size, unless it be in the inverse ratio; the smallest excrescence certainly gives equal pain and distress with the largest.

[One of these excrescences having been examined microscopically by Mr. Quekett, he gives the following account of it:]

A vertical section through the middle of the mass showed several papillæ of various sizes, which were very vascular, and surrounded by an investment of cuticle, which with the papillæ, made up the entire mass of growth; at the part where the papillæ were situated, the growth was smaller than at the opposite extremity, as though it had been attached by a constricted neck or pedicle. The papillæ, no doubt, were largely supplied with nerves, as well as blood-vessels, but their presence could not be detected by the microscope. The growth may be said, then, to consist of hypertrophied papillæ, invested with a thick layer of cuticle, which projected from the general surface of the mucous membrane in a wart-like form. This connection with the papillæ will serve to explain the extreme sensibility generally possessed by these tumours.

[Mr. Norman concludes with some useful observations on the treatment of these tumours. He says:]

The most constant symptom of the disease is pain in the urethra, greatly augmented during micturition, which is sometimes suppressed by dread, and sometimes excessively frequent from the extension of the irritation to the bladder; augmented, also, by all movements of the vulva, by coition, and during the menstrual flux. A muco-purulent discharge from the vagina accompanies the growth, and there are occasionally severe sympathetic pains in the loins, pelvis, hips, and inside of thighs, and a discharge of blood, leading to the idea that the case is one of calculus of the bladder. To prevent this mistake, which has been often made, whenever the more common symptoms are present, and *not accounted for by a morbid condition of the urine*, careful examination of the vulva should be made before an opinion is given.

The external characteristics of these growths are sufficiently clear to prevent their being confounded with other swellings—as verrucæ, prolapsus of the bladder, eversion of the mucous membrane of the urethra, varicose tumour of this part, and still more with prolapsus uteri; a mistake which in one instance, has nevertheless happened.

The treatment required is strictly local, and consists of such means as entirely destroy the growth and are most likely to prevent reproduction. These are cauterization, caustics, astringent lotions, excision ligature, and pressure by bougies. They are all applicable in different cases. If the growth is single or double, and not attached by a very broad base, it may be removed either by excision or ligature. The former has, perhaps, the most numerous advocates, and among them Sir B. Brodie and Dr. Ashwell, and was practised in several of the cases cited in this paper. To the latter I give a decided preference, along with Sir Charles Clarke, in consequence of the serious hemorrage that often follows excision. In either case, a powerful caustic should be applied to the point from which the growth has been removed, to prevent its reproduction.

The actual cautery or caustics are only applicable primarily to very small excrescences near the orifice, and to those which answer to the description of Dr. Ashwell—*i. e.*, having the appearance of several raised coalesced granulations, or two or more isolated ones; as a secondary means, they are applicable, as before mentioned, after excision or ligature. The more powerful the caustic, if proper care be used to prevent its spreading, the less suffering it produces and the more quickly it effects its purpose. Potass, nitric acid, and per-nitrate of mercury are the best. Nitrate of silver gives excessive pain, and is slow and inefficient.—*Braithwaite's Retrospect, and Monthly Jour.*

Art. V.—*Remarks upon the Origin of Venereal Disease.* By F. C. Skey, Esq., F. R. S.

Mr. Skey thinks that a great many of the prevailing notions upon the subject of the venereal disease are erroneous; and, among the rest, those usually attributed to Mr. Hunter. He finds that ninety-nine out of one hundred venereal sores are better cured without mercury than with it. Amongst those forms of sores which Mr. Skey cannot cure without mercury, is one characterized by intense induration, to which induration, ulceration succeeds; this form of chancre, is, however, according to Mr. Skey's experience, extremely rare. Mr. S. goes on to say:]

The first principle I wish to establish is this, that the very large majority of venereal sores are what may be termed *simple sores*, and that such are the effects of a poison *of the least active and virulent kind.* That the poison becomes easily exhausted in the progress of the sore, which assumes a simple inoffensive form as soon as the first stage, or that of ulceration, has passed away. This sore, presents, however, peculiar characteristics through its progress, which alone distinguish it from ordinary sores. At present I wish to say a few words on the origin of venereal sores. The opinion almost invariably prevails, when a

patient exhibits a primary sore on the genital organs, that that identical sore has been obtained from the infected source. I believe there is no opinion more erroneous. *Venereal sores are*, for the most part, *self-generated* in the male. A sore may become the product of any form of irritating secretion in the female, as may gonorrhœa also. This is an opinion I have long entertained, and every year's experience more strongly confirms my conviction of its truth. I am prepared to affirm my belief that, having intercourse with a woman without venereal disease, a man shall acquire one or more venereal sores, of one or other character, or even gonorrhœa. Unless this doctrine be founded in truth, it would be difficult to explain the existence of venereal disease at the present day; but I am satisfied that it is founded in truth, and a most important doctrine it is. The records of surgery, if consulted, clearly point to the fact; I appeal to the writings of Abernethy, Rose, and Evans, and others. Mr. A. gives at length the case of a gentleman, who having visited the mistress of his friend, got a bad venereal sore, on three several occasions. All this time, a period of nearly three years, this woman was domesticated with the man who kept her, and was never suspected by him to be the object of venereal disease. Mr. Rose tells the well-known story of a Portuguese opera dancer who, undisturbed in her professional avocations, gave venereal disease of a formidable kind, to a host of British officers during the Peninsular war, who had connexion with her. Mr. Evans, from whose excellent work on venereal disease I also quote from memory, relates the fact, that whilst the army of occupation resided at Valenciennes, he had more than 100 soldiers in the hospital from venereal causes, and that the usual examination of the women of the town, at the moment, exhibited but three examples of the disease among the entire sisterhood.

Within the last three months, a medical man, who consulted me relative to a sore, volunteered the opinion, that the woman in question, could not be the subject of disease. Three several times did he examine her, and detected nothing. A patient in St. Bartholomew's Hospital, the subject of rheumatic gonorrhœa and articular rheumatism, declared that he had got the disease from his wife, and that he would drive her out of the house on his recovery. I asked him, "Have you any other reason to suspect your wife's fidelity beyond your having discharge?" He replied, "No." "Then let me examine her, for I dare say she has nothing amiss." I did so. I found nothing — no disease of any kind beyond what is commonly found—a slight degree of leucorrhœa. I have elsewhere recorded a case of severe gonorrhœa, contracted by a medical student who never had inter course but with one person, and that a young girl, living under her mother's roof, whom he seduced. On one occasion, by some accident, he had intercourse with her before her catamenia had ceased. But these cases are not necessarily confined to persons of the humbler station; a sprinkling of them exists throughout society.

A gentleman well and intimately known to me, attained twenty-seven years of age without ever having contracted venereal disease. He moved in a circle which associated him with women of rank and station. He accomplished an interview with a young lady during the absence

of her family, who *at the last* resisted him successfully. He showed me, within a few hours of the transaction, a large excoriated surface on the inner side of the prepuce and glands, the result of violence. On the day following, he had intercourse with a married woman in the same rank of life, having all the external indications of perfect health. I asked him whether, as a man of the world, he had the smallest reason to think the latter lady could be the subject of disease. He thought it quite impossible. Now, in truth, it is a good way from impossible, but it was highly *improbable.* So far as he could make inquiry he did so, and the inquiry confirmed his opinion.

The result of the second act was increased inflammation of the already abraded surface, and excessive pain. Early on the following morning, he called on me, and among other questions, asked me whether I considered him to have the pox? I answered unhesitatingly, — No. The wound, however, became phagedænic, and sloughed, and I applied nitric acid, and it sloughed again; and, in consultation with Mr. Welbank, strong nitric acid was resorted to. A large slough came away, and exposed a sore of formidable dimensions; and while this sore was in progress of healing, viz., in six weeks from the date of the poison, this gentleman was rewarded by an *intense phagedœnic eruption from head to foot.* He was now subjected to repeated salivations by mercury, having placed himself under the charge of another surgeon, and was twelve months under treatment. Now, in reasoning on this and similar cases,—for they all carry the same evidence,—I would ask, Is it probable, or even possible, that these women have disease without being conscious of it? In the case quoted from Mr. Abernethy's work on "Diseases Resembling Syphilis," is it possible that this woman had sores, or even discharge, for three years without being conscious of it? Is it reasonable to imagine that three women, in the case reported by Mr. Evans, an acute observer, truthful in his relation of facts, and ingenious in his reasonings upon them, could have communicated disease to 100 men; or, in the case I have last related, is it more probable that disease existed in this lady unsuspected of herself, or of another, who would have contracted it? It seems to me a just inference, that if a woman is unconscious of disease, having all the attributes of health, her husband being equally free, that the woman has not disease; and I believe such a woman, and in this condition, is competent to give venereal disease to a third person having intercourse with her, either through her own secretions possibly existing at the time in excess, or through the remains of catamenial discharge. At all events, that the secretions of the two persons combined, can produce and develope a *tertium quid,* which may have all the attributes and properties of venereal poison — a poison more readily developed in the person of a man having occasional than having frequent intercourse with the woman in question. Of course, I do not dispute the fact that disease really existing in either sex may be readily communicated from one person to another, though I doubt its being necessarily developed in the same form. Though gonorrhœa will generally produce gonorrhœa, the character of the sore is not by any means necessarily identical with that which produced it.

Now, in these opinions, I am happy to say, I do not stand alone. I am persuaded that many thinking men, if they have not adopted them entirely, are prepared to extend their belief to the whole doctrine; and I do honestly believe that such convictions would become universal in the profession, were it possible to divest our minds of the impressions of early education.—*Braithwaite's Retrospect, and Med. Gaz.*

OBSTETRICS.

ART. I.—*Case of Permanent Occlusion of the Uterus Obstructing Delivery.* By F. W. FOGARTY, M. D., M. R. C. S., London.

Mrs. D——, aged twenty-five, four years married, previous good health; aborted three months after; successfully operated on for fistula in ano, produced by abscess in perinæum fifteen months subsequent, and recovered rapidly; health in every respect quite re-established; became pregnant Nov., 1848; health continued good; no vaginal discharge, or uterine pains, during the first eight months; was then threatened with premature labour; pains strong and forcing for six hours; no vaginal discharge. Got an opiate; remained well for a week, when she was again threatened, and treated in a similar way.

On the 10th of August her pains returned, and continued, becoming hourly stronger. No vaginal discharge; bowels open; urine abundant; presentation cannot be reached by the finger.

11th.—Slept little during the night; pains regular and forcing; is uneasy and fretful; bowels active; urine plenty; pulse 80. The head has partly entered the pelvis; the os cannot be found; the finger cannot pass in front of the pubis; part of the hand now introduced, and the fingers passed in every direction, but cannot pass the brim of the pelvis, being stopped by the uterine and vaginal attachments all round the head, which clearly proves that the head had not escaped from the uterus; a minute examination is now made, but no os uteri can be found. Being now quite satisfied that I had to contend with a case of occlusion from ulceration, or some such cause, I determined to let matters go on quietly till the head advanced, and that portion of the uterus covering it was more stretched, when I proposed liberating the head by dividing the resisting parts.

12th.—Passed a restless night. Was visited early in the morning by Mr. Alridge, who politely attended in my absence. Pains regular and forcing; bowels open; urine empty; pulse 86; complains of want of rest, and exhaustion; head more advanced. Ordered thirty drops of laudanum, and to be again visited at two o'clock P. M., when I propose operating.

Two o'clock.—Is anxious to be delivered; slept a little; pulse 86; in other respects as last. I now examined the presentation through the speculum, in hopes of seeing where the os was originally situated; a glistening, irregular, pearly patch existed where the os might have been expected, but not sufficiently marked to prove it to be a cicatrix, but have no doubt that such it was. I now passed on my finger a sharp-pointed, guarded bistoury, and cut from behind forward to the extent

of one inch through the glistening expansion, through which the membranes immediately protruded, and having passed my finger through this opening, as also did Mr. Alridge, and satisfied ourselves that the existing state of things were such as we diagnosed, I continued the incision, by passing the bistoury on my finger between the head and the uterus to the extent of from three to four inches, then withdrawing the finger, and placing it outside the uterus over the point of the bistoury, passed the point through to the finger, and cut out, as in a fistula in ano; having done the same to a less extent in front, the case was left to Nature, and though the pelvis was rather contracted, labour terminated without further assistance in three hours, by the birth of a full-sized living boy, since which time the mother has gone on uniformly well, not having a single bad symptom; she is now up and able to be about the house.

In such a case as the above it is just possible to mistake it for a head-presentation, where the os was fully dilated and the head passed through. I need scarcely allude to the consequences such a mistake would lead to if it were deemed requisite, from contracted pelvis or other cause, to have recourse to instrumental delivery. It is well also to bear in mind, that in consequence of the stretched state of the uterus the knife should not be carried too far back or forward, so as to avoid wounding the uterine attachments, which must also be extended to a certain extent, and therefore likely to be wounded if this precaution were not taken. At the same time, I think the incision should be as large as these circumstances will admit, so as to prevent a rent, which if once commenced, no knowing where it might end. On the same principle I prefer an extensive longitudinal incision to a crucial one. In the after treatment I was naturally impressed with the importance of preserving a free opening from the uterus, but had no cause to interfere, as the parts healed by granulation, leaving a sufficiently large opening to admit the index-finger.—*London Lancet.*

Art. II.— *On the Influence extended by the Paternal upon the Maternal Organism through the medium of the Fœtus in Utero.* By Dr. A. Harvey, Physician to the Aberdeen Royal Infirmary.

Instances are sufficiently common among the lower animals, where the offspring exhibit, more or less distinctly, over and beyond the characters of the male by which they were begotten, the peculiarities, also, of a male by which their mother had at some former period been impregnated—or, as it has been otherwise expressed, where the peculiarities of a male animal that has once had fruitful intercourse with a female, are more or less distinctly recognised in the offspring of subsequent connexions of that female with other males. A young chestnut mare, seven-eighths Arabian, belonging to the Earl of Morton, was covered in 1815, by a quagga, which is a species of wild ass from Africa, and marked somewhat after the manner of the zebra. The mare was covered but once by the quagga, and after a pregnancy of eleven months and four days, gave birth to a hybrid which had distinct marks of the quagga, in the shape of its head, black bars on the legs

and shoulders, &c. In 1817, 1818, and 1821, the same mare, (which had in the mean time passed into the possession of Sir Gore Ouseley,) was covered by a very fine black Arabian horse, and produced, successively, three foals, all of which bore unequivocal marks of the quagga. Several other examples illustrative of the great fact above stated will presently be given.

Great difficulty has been felt by physiological writers in regard to the proper explanation of this kind of phenomena. They have been ascribed by some to a permanent impression made somehow by the semen of the first male on the genitals, and more particularly on the ova, of the female: and by others to an abiding influence exerted by him on the imagination of the female and operating on her mind at the time of her connexion subsequently with other males, and perhaps during her pregnancy. But they seem to be regarded by most physiologists as inexplicable.

Very recently, in a paper published in the Aberdeen Journal, an intelligent veterinary surgeon, Mr. James M'Gillivray, of Huntly, has offered an explanation, which seems to me to be the true one. His theory is set forth in the following statements quoted from that paper:— "When a pure animal of any breed has been pregnant to an animal of a different breed, such pregnant animal is a cross ever after; *the purity of her blood being lost*, in consequence of her connexion with the foreign animal:" and again; If a cow, "say of the pure Aberdeenshire breed, is a calf to a bull of the short-horn breed (known as the Teeswater breed,) in proportion as this calf partakes of the nature and physical haracters of the bull, just in proportion will the *blood* of the cow beome *contaminated*, and herself a cross, forever incapable of producing pure calf of any breed." It is maintained, therefore, (Mr. M'Gillivray dds,) that the great variety of non-descript animals to be met with, re the result of the crossing system; the prevailing evil of which is, the admission of bulls of various breeds to the same cow, *whereby the blood is completely vitiated.*

[A consideration of this subject, says Dr. Harvey, suggests the following questions:]

1st. Whether, in the case of a woman who has been twice married, and borne children to both husbands, the children borne to the second husband ever, or generally, partake of the peculiarities of the first husband? 2d. Whether in a family of several children, the younger children rather than the elder, are disposed *cæteris paribus*, to exhibit the characters of the father? 3d. Whether a woman who has borne several children by the same husband, may not ultimately acquire some of the physical characters, or at least imbibe and manifest some of the morbid tendencies of the latter?

[In treating this subject, Dr. Harvey proceeds first to state what facts are known regarding it, both as to the lower animals, and as to the human species.]

As regards the brute creation:—Besides the instance already quoted of the mare belonging to Lord Morton, there is another similar case recorded. A mare belonging to Sir Gore Ouseley, was covered by a

zebra, and gave birth to a striped hybrid. The year following, the same mare was covered by a thorough-bred horse, and the next succeeding year by another horse. Both the *foals* thus produced were striped; *i. e.*, partook of the characters of the zebra. And it is stated by Haller, and also by Beeker, that when a mare has had a *mule* by an ass, afterwards a *foal* by a horse, the foal exhibits traces of the ass.

In the foregoing cases, the mares were covered, in the first instance, by animals of a different species from themselves. But cases are recorded of mares covered in every instance by horses, but by different horses, on different occasions—where the offspring partook of the characters of the horse by which impregnation was first effected. Of this Mr. M'Gillivray gives two examples. Thus, in several foals, in the Royal stud at Hampton Court, got by the horse *Actæon*, there were unequivocal marks of the horse *Colonel*, — the dams of these foals were breed from by Colonel the previous year. Again, a colt, the property of the Earl of Suffield, got by *Laurel*, so resembled another horse, *Camel*, "that it was whispered, nay, even asserted at Newmarket, that he must have been got by Camel." It was ascertained, however, that the mother of the colt was covered, the previous year, by Camel.

It has often been observed, that a well-bred bitch, if she have been impregnated by a mongrel dog, will not, although lined subsequently by a pure dog, bear thorough-bred puppies in the next two or three litters.

The like occurrence has been noticed in respect to the sow. A sow of the black and white breed (known as Mr. Western's breed,) became pregnant by a boar of the wild breed, of a deep chestnut color. The pigs produced were duly mixed, the color of the boar being in some very predominant. The sow being afterwards put to a boar of the same breed with her own, some of the produce were observed to be stained or marked with the chestnut color that prevailed in the former litter. And on a subsequent impregnation, the boar being still the same breed as the sow, some of the litter was also slightly marked with the chestnut color. What adds to the value of the fact now stated is, that in the course of many years' observation, the breed in question was never known to produce progeny having the smallest tinge of the chestnut color.

Breeders of cattle are familiar with analogous facts as occurring in the cow. A pure Aberdeenshire heifer was served with a pure Teeswater bull, to whom she had a *first-cross* calf. The following season the same cow was served with a pure Aberdeenshire bull; the produce was a *cross* calf, which at two years old had very long horns, the parents both hummel. A pure Aberdeenshire cow was served, in 1845, with a cross bull — *i. e.*, an animal produced between a first-cross cow and a pure Teeswater bull. To this bull she had a cross-calf. Next season she was served with a pure Aberdeenshire bull — the calf was quite a *cross* in shape and color.

Mr. M'Gillivray, after relating the whole of the foregoing examples, says: "Many more instances might be cited, did time permit. *Among cattle and horses they are of every day occurrence.*"

[The facts bearing on this subject in connection with the human species are much fewer in number. It is obvious that decisive facts can only be obtained by observations of marriages between parents of different races—Europeans and Negroes, for instance. Some such facts Dr, Harvey records. He says :]

My colleague, Dr. Dyce, tells me, that he has certainly known one instance (if not more) where a Creole woman bore fair children to a white man ; and that the same woman had afterwards to a Creole man, other children who bore much resemblance to the white man, both in features and complexion.

The following additional cases illustrative of this question have recently been communicated to me ; the first by my friend the Rev. Charles M'Combie, of Tillyfour, minister of Lumphanan, in Aberdeenshire : the second by Professor Simpson, of Edinburgh : —

1. Mrs. ——, a neighbor of Mr. M'Combie, was twice married, and had issue by both husbands. The children of the first marriage were five in number ; of the second, three. One of these three, a daughter, bears an unmistakeable resemblance to her mother's first husband. What makes the likeness the more discernible is, that there was the most marked difference, in their features and general appearance, between the two husbands.

2. A young woman, residing in Edinburgh, and born of white (Scottish) parents, but whose mother sometime previous to her marriage, had a natural (mulatto) child by a negro man-servant, in Edinburgh, exhibits distinct traces of the negro. Dr. Simpson, whose patient the young woman at one time was, has had no recent opportunity of satisfying himself as to the precise extent to which the negro character prevails in her features ; but he recollects being struck with the resemblance, and noticed particularly that the hair had the qualities characteristic of the negro.

It is of more immediate interest, however, and of greater practical moment, to ascertain whether, through the medium of the fœtus, the husband may impart to his wife either the syphilitic virus or the scrofulous diathesis, or any other constitutional morbid tendency (*e. g.* insanity,) which he may possess. Facts are wanting on this subject ; but it is not undeserving of patient inquiry.

Dr. George Oglivie, of this city, informs me of a case, which fell under his own observation, where a woman was twice married, and had children by both husbands, and where the children by both marriages were scrofulous, although only the first husband had marks of that diathesis ; the woman herself, and her second husband, being to all appearances quite healthy.

[Another case was communicated to Dr. Harvey, by Professor Pirrie, of Aberdeen.]

Mrs. H——, apparently perfectly free from scrofula, married a man who died of phthisis. She had one child by him, which also died of phthisis. She next married a person who was to all appearance equally healthy as herself, and had two children by him, one of which died of phthisis, the other of tubercular mesenteric disease—having at the same time scrofulous ulceration of the under extremity.

[Dr. Harvey proceeds to say, that, in these cases,]

Before the mother could have imparted the scrofulous taint to her offspring by the second husband, she must herself have imbibed it from her first husband through the medium of his offspring while in utero. And, although still seemingly free of the taint, it may have required only the appropriate external condition to call it into full activity in her own person. And, with regard to the syphilitic poison, there is no difficulty in understanding, and it is quite within the bounds of probability, that the fœtus, if contaminated with it by its father, may convey it to the mother. Messrs. Maunsell and Evanson, after mentioning that they have notes of the case of a syphilitic child, whose mother had been infected by a former husband, (they do not say in what way,) and to all appearances cured five years before its birth—the father of the child (her second husband) being in good health—state that their experience would enable them to adduce many curious facts bearing on the communication of the syphilitic poison. Perhaps their experience might furnish an affirmative solution of the question at issue. It has been affirmed, indeed, that a man who has once had syphilis, but been seemingly cured of it for many years, may yet so retain the taint of it as to contaminate his offspring, without, at the same time, tainting his wife. Very possibly. But this does not prove that he may not contaminate his wife also; and the observation itself is in that respect fallacious, inasmuch as, in any given case of the kind, the wife may really have imbibed the virus, although in a latent form, and might subsequently give proof of the reality of the fact, by tainting the offspring begotten by another and a perfectly healthy husband. Adopting this view, it may be found of importance, in contemplating marriage with a widow, to inquire into the constitutional peculiarities of her deceased husband!

[Dr. Harvey next discusses the theories which have been put forth in explanation of facts like these. He says:]

The first is that suggested by the great Haller, who ascribes it to a permanent impression made by the semen of the male on the genitals, and more particularly on the ova, of the female; the second, that suggested by Mr. M'Gillivray, who ascribes it to an influence exerted by the fœtus in utero on the constitution of the mother. The notion entertained by Sir Everard Home and others, that it is an affair of the imagination, seems too absurd to require serious consideration.

Mr. M'Gillivray's theory seems to me to meet the whole facts of the case, and to deserve support from a great variety of facts in regard to the reception and constitutional effects of morbific poisons and morbid diatheses.

Mr. M'Gillivray, indeed, supposes that there is a *direct* vascular connexion between the fœtus in utero and its mother; and he seems to consider the validity of his theory to hinge on this assumption. The assumption, however, is untenable, nor is it at all necessary for the establishment of the theory.

[Dr. Harvey proceeds to say:—

In connection with the constitutional influence exerted by the male, through the medium of the fœtus in utero, on the system of the female,

another and a very singular question may be raised. In the case of an aboriginal woman of color, does previous impregnation by an European male render the female incapable ever after of fruitful intercourse with a male of her own race?

This question is suggested by an observation, made in various parts of the world, by the excellent Count de Strzelecki, relative to the effect of fruitful intercourse between an aboriginal female and an European male. "*Whenever such intercourse takes place,*" says the Count, "*the native female is found to lose the power of conception on a renewal of intercourse with the male of her own race, retaining only that of procreating with the white men.*"

This, if a general fact, contrasts remarkably with Dr. Simpson's case above mentioned, (one of fruitful connexion between a white man and a white woman, after previous impregnation of the latter by a black man,) unless, indeed, this be, which probably it is not, an exception to an equally general fact of the same sort. It would limit, also, — nay, absolutely exclude, opportunities of observing whether children born of dark parents, where the mother formerly had issue by a European male, exhibit traces of the latter. But it was before stated, on the authority of two gentlemen long resident in Jamaica, that in our West India colonies — in Jamaica, at least — fruitful connexions of this kind are of common occurrence, and (which I mention at present as in keeping with this,) on the authority of Dr. Dyce, that in children born under such circumstances, marks of the European have been observed. Special inquiries, made recently, have served so far to confirm these statements, but not to satisfy me that the issue of such connexion is numerous.

The opportunities, however, enjoyed by the Count de Strzelecki, of making observations as to this point, in most parts of the new world, have been very great. "He has lived much (to use his own words,) amongst different races of aborigines,—the natives of Canada, of the United States, of California, Mexico, the South American Republics, the Marquesas, Sandwich, and Society Islands, and those of New Zealand and Australia." And, referring to the statement made by him and already quoted, the Count observes — "*Hundreds of instances* of this extraordinary fact are on record in the writer's memoranda, *all recurring invariably under the same circumstances*, amongst the Hurons, Seminoles, Red Indians, Yakies, (Sinaloa,) Mendosa Indians, Araucos, South Sea Islanders, and natives of New Zealand, New South Wales, and Van Dieman's Land; and all tending to prove that the sterility of the female, which is relative only to one and not to another male, is not accidental, but follows laws as cogent, though as mysterious, as the rest of those connected with generation."

The alleged relative sterility of the native female, after intercourse with the European male, is brought forward (it may be added) by Strzelecki as affording an explanation, and as being the chief cause of the gradual diminution and ultimate extinction of the native tribes in most parts of the new world, which follow the introduction of the European races. "Wherever the white man has set his foot-mark, there

the print of the native foot is obliterated; and as the tender plant withers beneath his tread, so withers the aboriginal inhabitant of the soil." And "human interference," says Strzelecki, "to avert this melancholy consequence, has been hitherto of no avail; a charter for colonization granted to one race, becomes virtually the decree for the extinction of the other."—*Braithwaite's Retrospect, and Monthly Journal.*

ART. III.—*Pelvic Cellulitis.* By Dr. LEVER, Physician-accoucheur to Guy's Hospital.

[After detailing several interesting cases of this description, which are too often overlooked by practitioners, Dr. Lever remarks:]

Pelvic cellulitis, in the majority of instances, is not due to any mismanagement or neglect on the part of the puerperal attendant. It may follow abortion, and labour, either premature or at full term. It will be found to come on after preternatural, complex, or flooding delivery; it sometimes arises after labours terminated artificially, whether by the hand or by instruments, and sometimes it is very prevalent during an epidemic puerperal fever. The child born may be small or large; but where there is a want of proportion between the child's head and the pelvis, and where such labours are lingering, or are terminated artificially, multiplied observations have convinced me that that part of the pelvis affected will be found to correspond with the position of the fœtal occiput. Patients of the strumous are more susceptible than those of a contrary diathesis. The symptoms usually supervene on the second or third day after delivery; in some instances they come on actively, in other cases insidiously; quickness of pulse and anxiety of countenance being the most constant attendants. In all cases the secretion of milk is small; the lochia diminished: in some the one is absent, the other arrested. Pain, moreover, is a constant symptom, at first, confined to the part inflamed; but as the disease advances, and the inflammatory products are effused, the pain is increased, and the patient will point out with anatomical accuracy the course of the nerves upon which the trespass is committed. In some cases the disease is very marked, the patient even going out at the end of the month; but still, if strict inquiry be made, it will be found that she has not felt so well as after previous confinements, and that on one side or the other there have been pain and a want of power in the lower extremity. My experience leads me to believe that the left side of the pelvis is much more frequently affected than the right; and it will be conceded that the occiput of the fœtus is more frequently directed to that side. The decubitus of these patients is most marked; they lie on the back or on the sound side, with the thighs flexed, with the affected extremity resting for support on the sound limb and rotated inwards, giving the observer the idea of diseased hip joint; this is most markedly shown in the cases above related. This disease terminates either in resolution, suppuration, or absorption of the inflammatory deposit; the former is rarely seen in hospital patients, the second is not uncommon. The abscess may present or open externally, or it may burst internally. Where pus was dis-

charged into the vagina, it will sometimes open into neighboring viscera. The matter in some cases is found to burrow deep into the pelvis, and the bone may become diseased, but after suppuration has taken place, and the pus has become evacuated, and the abscess has closed, there will be considerable induration, in the removal of which, time and improvement of health are the two great remedies. Induration is perhaps by far the most common result of pelvic cellulitis.

These cases, when admitted into the hospital, rarely demand or admit any active treatment. I have never seen one where general depletion was called for or needed. Local depletion, repeated from time to time, according to the activity of the disease and the strength of the patient's constitution; warm poultices, simple or medicated; tepid anodyne injections carefully thrown into the vagina; attention to the state of the bowels, which are prone to irregularity, at one time constipated, at another relaxed; the use of mild mercurials, until the gums become slightly affected, and maintaining this with gentleness, are, in my belief, the best means of treating the disease. At the same time the diet must be bland and nutritious, and the powers of the patient must be supported. When it is evident that suppuration has taken place, I am an advocate for evacuating the pus, as soon as it can be done with certainty and safety. The diet must be improved; port wine, &c., given with free but prudent hand; while bark, quinine, and the mineral acids will aid in the recovery of the patient. To promote the absorption of the induration which follows suppuration, or to quicken the external progress of the pus, I place great faith in the employment of blisters. Absorption is still further promoted by pot. iodid., administered in some bitter infusion or in sarsaparilla.—*Ibid., and Guy's Hospital Reports.*

PART FOURTH.

BIBLIOGRAPHICAL NOTICES AND REVIEWS.

1.—*A Treatise on Baths, including cold, sea, warm, hot, vapour, gas, and mud baths; also, on The Watery Regimen, Hydropathy, and Pulmonary Inhalation; with a Description of Bathing in Ancient and Modern Times.* By JOHN BELL, M. D., &c., &c. Philadelphia: Barrington & Haswell. 1850. 12mo. pp. 658.

This comprehensive treatise, which is dedicated to the venerable Chapman, exhibits a systematic view of the operation and effects of the different kinds of baths on the animal economy, as well in its healthy as in its diseased states, containing all that appeared in the author's former work on Baths and Mineral Waters, so far as relates to the subject of bathing, together with much amplification of old, and addition of new matter. In its present shape, the work presents a comprehensive and

connected view of the whole subject, such as hitherto has been wanting in our language. The work is addressed both to the public and the profession, and comes very opportunely we think, both to awaken the professional mind to a sense of the *value* of aqueous medication, and the public mind to a sense of its *danger*. It is indeed the creed of our author, that even the simple fluid water, cannot "be employed with safety and advantage as a *remedy*, except by persons properly qualified to practice medicine," and this is entirely our own confession of faith.

"In the details on the 'Watery Regimen,' it is the aim of the author to familiarize his readers with the importance of dietetics, in the large sense, and to exhibit this branch in its true relation to medicine. If required to define their relative position to each other, there can hardly be a doubt that medicine ought to be regarded as an appendage to dietetics, and not dietetics an appendage to medicine."

The work before us is the most comprehensive, pleasantly written, and practical one on the subject in our own, or we believe in any other language, and we do but justice both to the author and to the subject, in recommending it most highly to the profession and the public. (For sale by Whiting & Huntington.)

2.—*An Historical Sketch of the state of Medicine in the American Colonies, from their First Settlement to the Period of the Revolution.* By JOHN B. BECK., M. D., &c., &c. Second Edition. Albany: 1850, 8vo. pp. 63.

We have been very much interested in reading this able essay modestly entitled "Sketch," the substance of which formed the theme of a discourse delivered by the learned author before the New York State Medical Society, a few years since. In a country where the study and practice of medicine are much influenced by that same spirit of independence which is the distinguishing mark of its institutions, both civil and political, the history of medicine must be of very unusual interest, as presenting a striking illustration of the effects of that influence on the character and march of science. The period which our author has chosen, is necessarily less illustrative of that influence than later times, yet its history should not the less be read with avidity, by every patriotic son of Galen. As to the manner in which our author has acquitted himself of the task, were his name not a sufficient guarantee of excellence, the words "second edition," in the case of a work of this character, "speak volumes."

3 — *Minutes of the Proceedings of the South Carolina Medical Association, at its Annual Meetings, February,* 1849–'50, *together with the Transactions of the Board of Counsellors, and the Anniversary Oration, by Dr. J. P. Barratt.* Charleston, S. C., 1850.

These evidences of exertion on the part of brethren in science and art, to forward the best interests of humanity by marshaling forces, holding council together, and acting in concert, fill us with enthusiasm, sanctify medicine in our eyes, and incontinently call up visions of its future destinies, which we devoutly hope may prove prophetic.

The society numbers about 260 members, and its aim is "to embrace *every* individual attached to the profession, who is practising within its borders, who is worthy of the calling to which he has devoted his life; and finally to *group* ourselves into *local* organizations according as these may be determined by circumstances of fitness or expediency. We would secure to ourselves the advantages of *social* as well as *professional State unity* and *harmony.*" These are indeed the legitimate objects of such societies, and to such organized bodies we now look alone for all elevation of the profession in this country.

The following preamble and resolutions moved by Dr. J. Davis, we take the liberty of extracting, as the subject in our opinion ought never to be lost sight of:

WHEREAS, Congress having passed a law for the suppression of the importation of impure and inert Drugs, has vested in the Treasury Department the power and duty of appointing an Inspector of Drugs, for each port: And, whereas, an Inspector has been appointed for the Port of Charleston, whose acquaintance with the science of Medicine seems not to be sufficient to guarantee the faithful enforcement of said law: Therefore be it

Resolved, By the South Carolina Medical Association, that the Treasury Department be informed of this matter and urged to change the appointment, so as to insure the faithful discharge of the duty enjoined by the law; and further be it

Resolved, That the officers of this Association be charged with the duty of conferring with the Treasury Department on the subject, at the earliest convenience.

The above preamble and resolutions were sustained by Dr. Cohen in a few forcible remarks, in the course of which he stated, that in consequence of the detection of spurious drugs at the ports of the North, *several large importing houses in those cities, learning that a person had been appointed Inspector for Charleston who was totally incompetent to discharge the duties of his office, had written to their correspondents in Europe to send their drugs through Charleston.**

*The Italics are our own.—ED. O. M. J.

Dr Mackey moved an amendment to Dr. Davis' last resolution, viz. that the subject be brought both before Congress and the Treasury Department; which amendment being accepted by Dr. Davis, the preamble and resolutions, so amended, were put to the vote, and adopted.

D. J. Branch, Vice President, offered the following preamble and resolutions, which, on being seconded and put to the vote, were carried:

WHEREAS, in accordance with the joint recommendation of the New York College of Pharmacy, the American Medical Association, and the South Carolina Medical Association, Congress has, with a promptitude worthy of the wisdom of that body, passed a law for the suppression of the importation of spurious, adulterated and inert Drugs: And, whereas, the most alarming developments have been exposed by an investigation made by Dr. Edwards, who was appointed by the Treasury Department to enquire into the operation of that law of Congress, and who, after spending five weeks in the cities of Boston, New York, Philadelphia and Baltimore, actually ascertained that since the first of July last, and from that time to the first of January, 13,019 lbs. of Rhubarb, 344 of Opium, 7,215 Jalap, 1,414 Gamboge, 1,400, Senna, 30,695 Peruvian Bark, 3,063 oz: Iodine, 1,704 lbs. Gum Myrrh have been condemned: And, whereas, we have no doubt but if such an Act were made to include *nostrums* of every description, results a hundred times more alarming would be brought to light: And, whereas, we are satisfied, that in order to perfect this system, it is indispensably necessary to bring State, as well as United States, action to bear upon the business: Therefore, be it

Resolved, By the South Carolina Medical Association, that a committee consisting of the Charleston Delegation, (of which Prof. Moultrie shall be Chairman,) be appointed to memoralize the Legislature on the subject.

Resolved, That this committee be instructed to urge on the Legislature the great necessity of having a suitable Inspector appointed for the City of Charleston.

Resolved, That this committee be also instructed to place the business of *nostrum vending* in a very prominent light before the Legislature.

Resolved, That 500 copies of the report of Dr. Edwards be published for circulation in the State, and that the Secretary be instructed to supply each member of the Legislature with a copy.

The address of Dr. BARRATT is an elegant as well as eloquent production.

4.— *Transactions of the Medical Society of the State of New York, during its Annual Session, held at Albany, February 5,* 1850. Albany, 1850.

Here we are presented with a goodly volume of 280 pages, containing essays, addresses, cases, and so forth, an interesting and instructive miscellany. We would particularize an able paper by Dr. Alexander H. Stevens, President of the Society, on the communicability of cholera, in which the author contends for the contagious character of the disease, and under full conviction that it is so, asks, "Is there no advantage to be derived from a knowledge of the fact that isolation affords entire (!) security? That the painful and often injurious restrictions in diet are, under such circumstances, entirely unnecessary? How much needless exposure, often from mere curiosity, may be avoided by excluding from the presence of the sick, those who manifest a tendency to diarrhœa, who use ardent spirits to excess, who are debilitated in body and timid in mind, and by husbanding the strength and supporting the energies of devoted friends at the bedside?" A little further on we find the following consolatory remarks, with which the essay winds up: "Notwithstanding the fatal character of cholera without treatment, it is in its early stages the most curable of all diseases. It is indeed among the few, the very few diseases which strictly speaking are curable at all; other diseases are managed, this is arrested."

That little-cultivated field "medical topography," is not overlooked; some delving therein has been accomplished, and good seed sown; and apropos of our leading article, a successful case of ovariotomy is related by the operator, Alden March, M. D, President and Professor of Surgery in the Albany Medical College.

5.— *The Transactions of the American Medical Association, instituted* 1847. Vol. II. Philadelphia. Printed for the Association, by T. K. and P. G. Collins. 1849. pp 956.

To notice this portly tome as we could wish, would take up more of our space than we can possibly spare in any number of this present volume of the Journal; we will therefore content ourselves with remarking, that all who wish to be "posted up" on what is going on in the profession, with a view to extending its usefulness, directing its energies, sustaining its dignity, and guarding its interests, had better lose no time in ordering the book while it is to be had.

PART FIFTH.

EDITORIAL.

TRANSACTIONS OF SOCIETIES.

Under this head we propose to present our readers with abstracts of the proceedings of Associations for legitimate medical purposes, both foreign and indigenous.

Abstract of the Proceedings of the American Medical Association, at the third Annual Meeting, held at Cincinnati, May, 1850.

The Association met in the "College Hall," May 7th, at 10½ A. M.

The President, Dr. WARREN, in the Chair.

Dr. Strader, on behalf of the committee of Arrangements, read a list of the delegates who had registered their names. About three hundred delegates were present.

The President delivered an Address.

On motion of Dr. Watson, of N. Y., the Constitution was read.

The rules being suspended, Dr. Watson moved that Drs. Drake, Rives, Lawson, Dodge, Strader and Richards, members of the committee of Arrangements appointed in 1849, but not belonging to the Association, be elected permanent members.

On motion of Dr. Stille, the name of Dr. C. C. Caldwell, of Louisville, was added to the number, and the whole elected by an unanimous vote. - - - - -

Adjourned.

AFTERNOON SESSION.

The President in the Chair.

The committee of Arrangements reported the names of persons recommended by various delegates as members by invitation.

Dr. White, of N. Y., moved that the subject be referred to a Special committee of five, who should report, at the morning session, the names of all who ought to be elected by the Association; which was agreed to, and the following committee appointed:

Drs. Ware, of Mass.; Johnson, of Miss.; Dowler, of La.; Parrish, of Pa.; Flint, of N. Y.

The Secretary read a letter, addressed by the Secretary of the Smithsonian Institute to the President of the Association, relative to the registration of diseases, &c., throughout the United States, and offering, in behalf of the Smithsonian Institute, a room in its building as a place of meeting for the Association.

On motion of Dr. Phelps, of N. Y., that portion of the letter having reference to the Annual Meeting, was referred to the Nominating committee.

On motion of Dr. Knight of Conn., that part bearing upon registration, was referred to the committee on Hygiene.

The Secretary asked and obtained leave to present the Reports of the Publishing committee and the Treasurer.

They were accepted, and referred to the committee on Publication, and the resolutions appended to the report of the committee on Publication were adopted, as follows:

Resolved, That the assessment of the present year be *three dollars*.

Resolved, That those delegates who pay the assessment shall be entitled to one copy of the Transactions of the present year; and that the payment of two dollars, in addition, shall entitle them to two additional copies.

Resolved, That permanent members shall be entitled to one copy of the Transactions of the present year, on the payment of two dollars, and three copies on the payment of five dollars.

Resolved, That societies which are represented at this meeting shall be entitled to copies for their members on the same terms that such copies are furnished to permanent members.

Resolved, That permanent members, unless present at the meeting as delegates, shall not be subject to any assessment.

Resolved, That any delegate who is in arrears for his annual assessment shall not be considered as a permanent member.

Resolved, That the several committees be requested to bring their reports correctly and legibly transcribed; and that they be required to hand them to the Secretaries as soon as they have been read.

On motion of Dr. Parish, of Pennsylvania, the report of the committee on Medical Education, was made the order of the day for the next morning.

The Secretary presented and read part of the report on Hygiene.

Dr. Phelps moved the reference of the report to the committee on Publication.

Dr. Lawson, of Ohio, moved that it be laid on the table, for the further consideration of the meeting.

The amendment was negatived, and Dr. Phelps' motion was then adopted.

A communication from Dr. Fenner, of La., was received, accompanied by a portion of a work, now in the course of publication, upon the Meteorology, Medical Topography, and Diseases of the Southern States, and asking the co-operation of the Association.

The subject was laid upon the table, in consequence of the entrance of the Nominating committee, prepared to report the names of the officers of the Association.

The committee, consisting of one from each State, reported the following as officers of the Association:

President.—R. D. Mussey, M. D., Ohio.

Vice Presidents.—J. B. Johnson, Missouri; A. Lopez, Alabama; Daniel Brainard, Illinois; G. W. Norris, Pennsylvania.

Secretaries.—Alfred Stille, Pennsylvania; H. W. De Saussure, South Carolina.

Treasurer.—Isaac Hays, Pennsylvania.

The report was accepted, and Dr. Smith, of N. J., moved that the officers thus nominated, be the officers of the Association for the ensuing year.

After some discussion by Drs. Storer, of Mass.; Yandell, of Ky.; McNally, of Ohio; White and Watson, of N. Y.,

Dr. Holt moved the previous question, which was sustained, and

Dr. Smith's resolution was adopted.

On motion of Dr. Roberts, of Md., the Association then adjourned until 9, A. M., May 8.

May 8th.—morning session.

Dr. Warren in the Chair.

The minutes of the previous meeting were read and approved.

The committee of Arrangements reported the names of delegates arrived since the previous report.

The following resolutions, offered by Dr. Bowditch, of Mass., were then unanimously adopted:

Resolved, That the American Medical Association has learned with deep regret of the death of Prof. Harrison, their late Vice President, and they hereby wish to express their high sense of the virtues, talents, and professional merit of their distinguished associate.

Resolved, That in dying, as he did, while engaged in ministering to the wants, and relieving the sufferings of his fellow citizens, this Association recognize in him a noble example of professional self-sacrifice.

Resolved, That the warmest sympathies of this Association are hereby most respectfully tendered to the family of their honored and deceased associate.

On motion of Mr. Stille, it was

Resolved, That a proper authenticated copy of the resolutions be transmitted to the family of Dr. Harrison.

Dr. Blackburn, of Ky., moved that a committee of three be appointed by the Chair to introduce the newly elected officers, and to conduct the President elect to the Chair.

The Chair appointed Drs. Knight, of Conn.; Corbin, of Va.; and Blackburn, of Ky.

The President elect having been introduced by the committee, was presented to the Association by the President. Dr. Mussey then returned his thanks to the Association for the honor conferred upon him.

On motion of Dr. Corbin, of Va., the late President and Vice Presidents were invited to take their seats upon the platform.

The following resolution, introduced by Dr. Kerfoot, of Pa., was unanimously adopted:

Resolved, That the thanks of the Association be tendered to the late officers for their very gentlemanly, courteous, and efficient manner of conducting the business of the Association.

Dr. Stille moved a suspension of the rules, for the purpose of hearing the report of the committee on members by invitation.

Dr. Ware, chairman of the committee, made a report, concluding with the following resolutions:

Resolved, That all those gentlemen who have been nominated to the Association be admitted as members by invitation.

Resolved, That, at the next meeting of the Association, a committee shall be appointed, at an early period of the session, to whom shall be presented all nominations of members by invitation, who shall report such of them for admission as shall appear, according to a liberal interpretation of the constitution, to have a claim to this privilege.

Dr. White, of N. Y., moved the adoption of the resolutions; but on motion of Dr. Rives, of Ohio, the resolutions were considered separately, and the first was adopted. The second, after much discussion, was, on motion of Dr. Palmer, of Michigan, indefinitely postponed.

Dr. Hooker, of Conn., offered the following:

Resolved, That the section in the Constitution relating to members by invitation be repealed.

This lies over, according to rule, until the next meeting of the Association.

Dr. Evans, of Ky., also offered a resolution of the same purport.

The President announced the report of the committee on Education as the order of business of the day.

Dr. Blatchford, of N. Y., presented the report of the committee on Education, which he requested might be read by the Secretary, as the chairman of the committee was absent. The Secretary read the report, which is the production of the chairman, Dr. Joseph Roby, Professor in the University of Maryland, and was not signed by either of his colleagues.

It refers in the first place to the previous discussions which have been entertained by the Association on this important question, and considers that they embrace a "somewhat intricate intermingling of facts and opinions." The facts include a statistical history of the number of schools, professors, students, and graduates, the means of instruction furnished, requirements for the degree, &c.

The opinions assert, in general terms, that the whole system of medical education in this country is defective and incomplete, from the fact that the schools are too numerous, their instructors too few, the time de-

voted to study too short, and the bestowal of honors too profuse, thus leading to a depreciation of the profession, and of the schools.

The report defines the position of the Association to be one of forbearance and conciliation towards the schools, its recommendations being advisory, and not binding; while it claims for the schools a general disposition to acquiesce in those recommendations, and to aid the association in its efforts to improve and advance the cause of sound medical learning.

The grounds upon which this latter conclusion is based, do not, however, appear to be clearly shown in the sequel.

In regard to the recommendations of the Association upon the subject of preliminary education, so far as these relate to the schools, the report states, "the Association has attempted to obviate this difficulty, (viz., a want of suitable preliminary education,) by urging upon the schools certain recommendations, which as yet have not been fully complied with. Neither of the parties most interested seem willing to meet the responsibility. The student dislikes to have his self-complacency offended, the practitioner fears to hazard the good will of the student, and the school is too anxious lest the portal of some active rival may be found easier of access than its own. Hence, with the defect generally acknowledged and deplored, it does not appear that much has been done towards applying any efficient remedy."

In regard to increasing the number of instructors, and the period of instruction, another recommendation of the Association, the language of the report is equally discouraging.

"We do not learn," says the chairman of the committee, "that there has been a general adoption of either of these recommendations."

In reference to the extension of the lecture term, the writer of the report appears to be in doubt as to whether the object of this recommendation was to increase the number of lectures, or to extend the time in which the same amount of instruction should be communicated. In confirmation of the latter being the correct view, it is stated, that "in the institution selected by the committee of 1849, as nearest the European model, in which the lecture term is one of six months, the aggregate amount of instruction, as reported, is really less than in another school, whose course continues but four and a half months."

This strikes us as a remarkable statement, and we are at a loss to perceive how the quantity of instruction can be so accurately measured and timed.

In regard to another recommendation of the Association, viz., that a more rigid test should be adopted by the schools, for admission into the profession, the report is still less satisfactory.

The writer contends that in this country, admission into all the liberal professions must be comparatively easy. "The nature of all our institutions supposes this. They must conciliate the public good will, upon which they are dependent for their existence and patronage, by a liberal exercise of their powers and privileges."

"This is especially the case with new institutions in new States. It may be be deemed doubtful, therefore, whether any uniform plan of medical education can be adhered to, through the Union. The Northern and Middle States, having a dense and wealthy population accustomed to educational institutions, and able as well as willing to sustain them, are in a very different condition from that of the newer communities of the West and South-West."

The report further denies the authority of any central power to enforce a uniform system of laws regulating matters pertaining to education, and believes that any attempt to adjust such a system would excite suspicion and opposition. "Indeed," says the report, "it is perfectly notorious, that the only institution in the country that approaches the best foreign schools in thoroughness of scientific and practical instruction, has, at times, barely survived the attacks of political jealousy."

It is to be regretted that the committee have not named the institution here referred to, as we apprehend the allusion was not understood by the great body of those who listened to the report, and we now confess our entire ignorance of it. The chairman declines a more elaborate examination of the subject committed, from an apprehension of multiplying issues between the profession and the schools, and proposes that the Association await the action of the schools upon the recommendations which it has issued.

This report, we are convinced, does not embody the views nor the policy of the Association, and two members of the committee, Dr. Blatchford, of Troy, N. Y., and Dr. Roberts, of Baltimore, both present at the meeting, declined signing it. It displayed, moreover, a most astonishing ignorance of the present condition of the Pharmaceutical department of Medicine.

Dr. Blatchford offered the following resolutions, prefacing them with the remarks that although a member of the committee, he had not seen the report until late on the preceding evening, and that he dissented altogether from the opinions it expressed:

WHEREAS, This Association has learned through its several committees, appointed from year to year to examine into the state of medical education in our country, that many of the medical colleges invested by law with the power of granting degrees, still continue a system of instruction which we cannot but regard as defective both in the time al-

lotted to the delivery of lectures, in the attention paid to practical anatomy, in the facilities afforded for clinical instruction, and in the low standard of the requirements for a degree; therefore,

Resolved, That this Association reiterates its former recommendations upon these points, and would urge upon the medical colleges to continue their efforts to elevate the standard of medical education, by adopting such changes in their courses of instruction as shall satisfy the just and reasonable desire of the profession.

Resolved, That the thanks of the American Medical Association are due to the Faculties of the *University of Pennsylvania*, and of the *College of Physicians and Surgeons of New York*, and all other institutions which may have conformed to our recommendations, for their prompt response to the recommendations of the Association for the improvement of Medical Education.

An interesting debate sprung up on the putting of these resolutions, rendering evident the determination of the Association to exert all its power and influence, for the purpose of reforming existing abuses, and removing the too glaring defects of institutions for medical instruction.

Much time having been spent in discussion, without coming to a direct vote, the matter was finally referred to the committee on Medical Education for next year. Subsequently a resolution offered by Dr. Morris as a substitute for the whole, was passed in committee, and, when reported to the Association, adopted. This resolution simply affirms anew the recommendations which had been made at previous meetings of the Association.

Dr. Stille wished to correct a statement made in the report, "that none of the Colleges of Pharmacy in the Atlantic cities seem to be in active operation." Dr. Stille called attention to the fact that the Colleges of Pharmacy of New York and Philadelphia were in active operation, and had shown their activity, amongst other ways, by taking an efficient part in procuring the passage of the law to prevent the importation of spurious and adulterated drugs.

Dr. Isaac Wood, of N. Y., also desired to say that the College of Pharmacy of New York was in active and efficient operation.

Dr. Parrish, of Pa., expressed himself at length in opposition to the doctrine of the report, but moved that it should take the usual course, and be referred to the committee on Publication.

Dr. Anna, of Ky., moved to amend by referring the report and the resolutions of Dr. Blatchford to a select committee, of which Dr. Parrish should be chairman.

After much discussion, Dr. Stille offered the following as an amendment, which was adopted:

Resolved, That the report of the chairman of the committee on Medical Education be re-committed for correction as to matters of fact, and then handed to the committee of Publication.

Resolved, That the resolutions of Dr. Blatchford be made the special order of the meeting of this afternoon.

On motion of Dr. Knight, of Ct., it was

Resolved, That the committee appointed to nominate the officers of the Association be continued, and that they be directed to nominate the several standing committees of the Association for the ensuing year, and also to designate the place of the next meeting of the Association.

Dr. Reyburn, of Mo., on behalf of the Medical Society of the State of Missouri, tendered an invitation from said society to the National Medical Association, to meet in St. Louis after the next annual meeting.

Adjourned.

AFTERNOON SESSION.

Dr. JOHNSON, Vice President, in the Chair.

The discussion of Dr. Blatchford's resolutions was resumed, and Dr. Miller, of Ky., moved to amend the first by inserting after the word "efforts," — "and the lay members of the profession who take office students to begin their efforts," which was accepted by Dr. Blatchford.

Before coming to a vote, the Association adjourned to 9 A. M., of Thursday.

MAY 9TH. — MORNING SESSION.

Dr. JOHNSON, Vice President, in the Chair.

The President announced the resolutions of Dr. Blatchford, amended by Dr. Miller, of Ky., as the first business in order.

Dr. Eve, of Ga., moved that the resolutions be indefinitely postponed, which was not adopted.

After much discussion, the previous question was moved by Dr. Edwards, and carried.

A motion for a reconsideration having been made, was carried, and the resolutions being again open for discussion, it was moved by Dr. J. R. Wood, of N. Y., that the Association go into committee of the whole, with Dr. Knight, of Ct., in the Chair. This resolution being adopted, Dr. Knight took the Chair.

When the committee rose to report, on motion of Dr. Lopez, the rules were suspended, in order to enable him to make an explanation and read a protest on behalf of the delegates of the State of Alabama, against certain statements made in the report of the committee on Education in 1849, and published in the volume of Transactions of that year; the protest concluding with the following resolution:

WHEREAS, The 3d section of the report on Medical Education, entitled "Legal requirements exacted of medical practitioners in the several States of the Union," being discordant with the laws of the State of Alabama, now existing and in force from 1823, unrepealed; and now especially at variance with a strict sense of justice and respect to the medical faculty of that State in their professional relations and public standing,

Resolved, That the foregoing protest be entered upon the minutes of this present convention, and entered on its published proceedings.

On motion of Dr. Cox, the protest was accepted, and referred to the committee of Publication.

Dr. Lopez, 2d Vice President, then took the Chair, and the Chairman of the Committee of the Whole reported that they had had under consideration the preamble and resolutions of Dr. Blatchford, and certain other resolutions herewith submitted, proposed by Drs. Lawson and Drake of Ohio, Theobald, of Md., and Gross, of Ky., which were recommended by resolution of Dr. Flint, of N. Y., to be referred to the Standing Committee for 1851; and that they afterwards adopted the accompanying resolution of Dr. Morris, of Pa., offered as a substitute for the above.

On motion, the report of the committee was adopted.

The following resolution was offered by Dr. Morris, of Pa., as a substitute for Prof. Lawson's amendment, passed in Committee of the Whole, reported to the Association, and adopted by it:

Resolved, That the recommendation of this Association at its former meetings in regard to medical education, be affirmed, and that private preceptors be still urged to receive into their offices only those duly qualified by previous education to engage in the study of medicine.

Adjourned.

AFTERNOON SESSION.

Dr. Lopez, Vice President, in the Chair.

Dr. Watson, of New York, presented the following resolution, which was adopted:

Resolved, That Dr. Fenner's projected annual publication on the Diseases and Statistics of the Southern portion of the United States, meets with the cordial approbation of the American Medical Association, and is worthy of the active support and co-operation of the profession.

Dr. J. K. Mitchell, of Philladelphia, presented and read the report of the standing committee on Practical Medicine, which was, on motion, received and referred to the committee on Publication.

The following list of nominations was presented by the Nominating Committee:

Medical Sciences.

Dr. Bennet Dowler, of New Orleans, Chairman.

Dr. Fenner, N. O.	Dr. F. G. Smith, Philadelphia.
" Upshur, Petersburg, Va.	" Carr, Canandaigua, N. Y.
" Johnson, Marion, Ala.	" Meers, Indianopolis, Ia.

Practical Medicine.

Dr. Austin Flint, Buffalo, N. Y., Chairman.

Dr. Conger, Buffalo, N. Y.	Dr. G. L. Corbin, York Co., Va.
" R. H. Davis, Baltimore, Md.	" J. McNaughton, Alb., N. Y.
" W. A. Norwood, Hillsboro', North Carolina.	" R. Haymond, Brookville, Indiana.

Surgery.

Dr. PAUL F. EVE, Augusta, Ga., Chairman.

Dr. J. N. Simmons, Ga.	Dr. S. D. Gross, Louisville, Ky.
" John Watson, N. Y.	" C. A. Pope, St. Louis, Mo.
" H. H. McGuire, Va.	" A. B. Palmer, Mich.

Obstetrics.

Dr. D. H. STORER, Boston, Chairman.

Dr. Reynolds, Boston.	Dr. S. Thompson, Albion, Ill.
" H. Miller, Louisville, Ky.	" Parker, Kenoska, Wis.
" T. M. K. Smith, Delaware.	" A. J. Mullen, Napoleon, Ia.

Medical Education.

Dr. WORTHINGTON HOOKER, Norwich, Ct., Chairman.

Dr. T. W. Blatchford, N. Y.	Dr. J. R. Wood, N. Y.
" J. B. S. Jackson, Boston.	" N. S. Davis, Chicago, Ill.
" E. W. Theobald, Baltimore.	" C. J. Blackburn, Cov., Ky.

Medical Literature.

Dr. THOMAS REYBURN, St. Louis, Chairman.

Dr. W. M. McPheeters, St. Louis.	Dr. Jas. Couper, Newcastle, Del.
" L. M. Lawson, Cincinnati.	" G. Tyler, Washington, D. C.
" S. Annan, Lexington, Ky.	" N. L. Thomas, Tenn.

Committee on Publication.

Dr. ISAAC HAYS, Philadelphia, Chairman.

Dr. Alfred Stille, Philadelphia.	Dr. J. R. W. Dunbar, Baltimore.
" D. F. Condie, "	" Isaac Parish, Philadelphia.
" H. W. De Saussure, Charleston.	" N. Sanborn, Henniker, New Hampshire.

Committee of Arrangements.

Dr. H. R. FROST, Charleston, Chairman.

Dr. P. C. Gaillard, Charleston.	Dr. J. P. Jervey, Charleston.
" H. W. De Saussure, "	" R. Lebby, "
" W. T. Wragg, "	" D. J. Cain, "

The committee also recommend that the next meeting of the Association be held at *Charleston, S. C.*

Adjourned.

MAY 10TH.—MORNING SESSION.

Dr. JOHNSON, Vice President, in the Chair.

Dr. Huston, Chairman of the committee on Spurious and Adulterated Drugs, read his report, concluding with the following resolutions:

Resolved, That the various State and local Medical Societies be requested annually to appoint Boards of Examiners, whose duty it shall be to procure specimens of drugs from the stores within their limits for examination, and report upon the same to their respective societies at least once a year.

Resolved, That the respectable druggists and apothecaries throughout the United States be requested to take active measures for suppressing the fabrication and sale of inferior and adulterated drugs; and that it is respectfully suggested to them, wherever practicable, to form themselves into societies or colleges, for the promotion of pharmaceutical knowledge, and general improvement in their profession.

Resolved, That a committee be appointed, consisting of one member from each State here represented, whose duty it shall be to collect information with regard to spurious and adulterated drugs, and report the same at the next meeting of the Association.

On motion of Dr. Stille, the report was received, and referred to the committee on Publication, and the resolutions were adopted.

Dr. Mussey, Chairman of the committee on Surgery, presented and read the report of the committee, which, on motion, was received, and referred to the committee on Publication.

Dr. Stille, of Pa., offered the following resolutions, which were read and adopted:

Resolved, That Dr. Caldwell be requested to prepare a report, to be presented at the next meeting, showing how far, in his judgment, the sciences of Phrenology and Mesmerism are founded in truth, and to what extent a knowledge of them may be rendered subservient to the treatment and cure of diseases.

Resolved, That Dr. Caldwell be requested to take into consideration the subject of Vital Organic Chemistry, and report to the next meeting, whether, in his judgment, it can be justly called a branch of science, and if so, how far a knowledge of it can be rendered available to the welfare of man.

The committee on Nominations reported the following names as composing the committees:

Committee on Indigenous Medical Botany and Materia Medica.

Dr. A. Clapp, New Albany, Indiana, Chairman.

Dr. J. M. Bigelow, Lancaster, O.	Dr. J. Carson, Philadelphia.
" G. Engelman, Mo.	" N. B. Ives, New Haven, Ct.
" H. R. Frost, S. C.	" U. Parsons, Providence, R. I.

Committee on Hygiene.

Dr. Jas. Moultrie, Charleston, S. C., Chairman.

Dr. P. C. Gaillard, S. C.	Dr. Anderson, Sumpterville, Al.
" H. W. De Saussure, S. C.	" G. Emerson, Philadelphia.
" D. Drake, Cincinnati, Ohio.	" J. Parrish, Burlington, N. J.

On motion, the report was accepted, and the nominations confirmed.

On motion of Dr. Yardley, it was

Resolved, That the committee on Hygiene be requested to report the best plan of warming and ventilating public and private buildings.

Dr. Blatchford, of N. Y., offered the following, which was adopted:

Resolved, That a special committee on Pharmacy and the Adulteration of Drugs shall be appointed by the President, consisting of seven

members, of whom Dr. T. O. Edwards, of Ohio, shall be Chairman, to report at our next annual meeting; and that the special committee on Forensic Medicine, appointed last year under Dr. Stevens' resolution, be reappointed, and that it be optional with Dr. Stevens to continue as Chairman, or to appoint a successor.

On motion of Dr. Morris, of Pa., it was

Resolved, That it is with great satisfaction the members of this Association have observed the establishment of drug stores in which neither patent medicines, nostrums, nor other articles by which the artful and designing impose on the ignorant and credulous, are exposed for sale; and that the Association recommends to its members to exert their influence in their respective spheres of action, to encourage similar efforts in other places.

Dr. Phelps, of N. Y., offered the following resolution, which was adopted:

Whereas, The clerical profession often, though perhaps sometimes unwarily, yield their extensive influence in the community in giving currency to quackery and quack medicines, therefore,

Resolved, That this subject be referred to the committee on Hygiene, to consider and report at the next annual meeting of the Association.

Dr. W. Hooker, of Ct., offered the following resolutions:

Resolved, That the rule in relation to nostrums and secret medicines, contained in our code of medical ethics, ought to be strictly observed by the medical profession under all circumstances.

Resolved, That when a physician claiming to be the inventor of a new medicine, and using the measures of the common quack in effecting its sale, manages to escape censure and punishment, and to obtain even the countenance of a portion of the profession, by revealing the composition of his medicine to such of his medical brethren as may desire it, he is guilty of a dishonorable evasion of the rule referred to, and should be so considered and treated by the whole profession.

Dr. Lawson, of Ohio, moved to amend by the addition of the following: —

Resolved, That this Association regards it as contrary to its system of ethics for medical journals to advertise nostrums, or secret remedies, although their composition may have been made known to the editor.

The resolutions and amendment were then adopted.

Adjourned.

AFTERNOON SESSION.

Dr. Johnson, Vice President, in the Chair.

Dr. Miller, of Kentucky, moved a suspension of the rules, and offered the following preamble and resolution, which were adopted:

Whereas, Clinical instruction in medicine and surgery is now generally acknowledged to be essential to the proper qualifications of students for the practice of these branches of our profession; and, whereas, it must be admitted that clinical instruction in midwifery would be equally valuable, therefore,

Resolved, That the committee on Medical Education be instructed to inquire whether any practical scheme can be devised to render instruction in midwifery more practical than it has hitherto been in the medical schools of the United States, and report at the next meeting of this Association.

The Secretary presented several reports, &c., which, on motion, were made the special order immediately after the report on Medical Literature.

Dr. Stille, Chairman, presented and read the report of the committee on Medical Literature, concluding with the following resolutions:

Resolved, That the Association regards the cultivation of Medical Literature as essential to professional improvement, and as adapted to form one of the broadest lines of distinction between physicians and all pretenders to the name.

Resolved, That in the opinion of this Association, it is equally the duty and the interest of the profession to sustain its periodical literature, both by literary contributions and subscription.

Resolved, That since literary excellence is best developed by literary studies, the formation of medical reading clubs, after the plan set forth in the report, is urged especially upon physicians in places where the periodical and other medical publications of the day are not readily accessible upon other terms.

Resolved, That the standing committee on Medical Literature be instructed to report to the Association at its next meeting, what medical work published during the year of their service, in their judgment is the most valuable, and, with the consent of the Association, such work shall be formally proclaimed by the President.

Resolved, That the State and Local societies are hereby recommended to offer pecuniary reward, or other distinction, for the best memoir founded upon original observation.

Resolved, That medical colleges are hereby recommended to distinguish the best inaugural thesis by a public announcement of its subject and the name of its author, and in such other manner as they may deem appropriate.

Resolved, That the sum of *one hundred dollars* raised by voluntary contribution, be offered by this Association for the best *experimental* essay on a subject connected either with Physiology or Medical Chemistry, and that a committee of seven be appointed to carry out the objects of this resolution: said committee to receive the competing memoirs until the first day of March, 1851; the authors' names to be concealed from the committee: and the name of the successful competitor alone to be announced after the publication of the decision.

On motion, the report was accepted, and referred to the committee of Publication, and the resolutions were adopted.

Committee on Prize Essays.

Dr. Francis G. Smith, Philadelphia, Chairman.

Dr. Alfred Stille, Philadelphia.	Dr. J. Moultrie, Charleston, S. C.
" Franklin Bache, "	" Robert Bridges, Philadel.
" L. P. Yandell, Louisville, Ky.	" Washington L. Atlee, "

In accordance with the above resolution, the Chairman has given notice that the sum of *one hundred dollars* is secured, and will be paid over to the successful competitor, or, if preferred, a gold medal of equal value, bearing a suitable inscription.

The competing memoirs must be transmitted to the Chairman, free of expense, and should be designated by some appropriate motto; the author's name accompanying it in a sealed packet, designated in like manner. The successful essay will become the property of the Association, and in case no paper of sufficient merit is offered, the time will be extended for another year.

After the decision of the committee, the sealed packet containing the author's name will be opened in presence of the Association.

The report and memorial of the committee on an International Copyright Law, ordered to be prepared at the last meeting of the Association, was read and accepted, and the memorial ordered to be signed by the officers and transmitted to Congress.

The report of the special committee, appointed to consider the measures suggested in the report on Medical Literature, for 1849, was submitted: the following resolution appended to the report was read and adopted:

Resolved, That in the opinion of this Association, the only legitimate means within our reach for the encouragement and maintenance of a national medical literature, is to increase the standard of preliminary and professional education required of those who would enter the medical profession; to promote the circulation among the members of the profession of the medical journals of the day; to encourage the establishment of district medical libraries, and to induce every practitioner to cultivate, with care, the field of observation and research that are within his reach.

On motion, the report was accepted, and referred to the committee on Publication.

Dr. Gross, of Ky., offered the following preamble and resolutions, which were adopted:

Whereas, The interests and dignity of the medical profession of the United States, as well as a true spirit of patriotism and a love of independence demand that we should use all proper and honorable means for the establishment of a national medical literature; and, whereas, we have hitherto paid too blind and indiscriminate a deference and devotion to European authorities, and not sufficiently patronized and protected our own, therefore,

Resolved, That this Association earnestly and respectfully recommends to the medical profession generally, and to the various medical schools in particular, the employment of native works as text books for their pupils, instead of the production of foreign writers.

Resolved, That the editing of English works by American Physicians, has a tendency to repress native literary and scientific authorship, and ought therefore to be discouraged by all who have at heart the objects contemplated in this preamble.

Resolved, That this Association will always hail with satisfaction the reprint, in their original and unmutilated form, of any meritorious work that may emanate from the British press.

On motion of Dr. Roberts, of Maryland, it was

Resolved, That a committee of three be appointed by the Chair, for the purpose of preparing for the action of the Association at its next convention, all unfinished business found upon its records.

Dr. Roberts also offered the following which was adopted:

Resolved, That all proposed alterations of the constitution be, and they hereby are, laid on the table for the present.

Dr. Drake, of Ohio, offered the following as an amendment to the constitution:

Resolved, That the second section of the Regulations of the Association be so amended, as to require that candidates for membership, by invitation, be nominated in writing by five members: that when elected they shall enjoy all the rights of delegates, and that all permanent members shall be entitled to vote.

The resolution involving an amendment to the constitution lies on the table till the next meeting.

Committee on Pharmacy and Adulterated Drugs, under Dr. Blatchford's *Resolution.*

Dr. T. O. Edwards, Cincinnati, Chairman.

Dr. T. W. Blatchford, Troy, N. Y.	Dr. E. W. Theobald, Baltimore.
" R. M. Huston, Philadelphia.	" H. R. Frost, Charleston, S.C.
" H. J. Bowditch, Boston, Mass.	" J. B. Johnson, St. Louis.

After transacting some miscellaneous business and passing votes of thanks, &c., the Association adjourned *sine die.*

Ohio State Medical Convention.

The Ohio State Medical Convention met in the United States Court House, pursuant to adjournment, at 10 o'clock A. M., Tuesday, June 5th, 1850.

The following officers were unanimously elected:

President—W. W. RICKEY, of Toledo.

1*st*	*Vice*	*President,*	William Judkins, of Cincinnati.
2*d*	"	"	Robt. Hamilton, of Morristown.
3*d*	"	"	—— Bennett, of Tuscarawas.
4*th*	"	"	Marcus Brown, of Circleville.
5*th*	"	"	W. Blackstone, of Columbus,

Secretaries.

John A. Murphy, of Hamilton county.
J. T. Updegraff, of Jefferson county.

Treasurer.

J. B. Thompson, Columbus.

Much interesting discussion took place during the sittings of the convention, which adjourned on the evening of the 7th June, to meet in Columbus on the first Tuesday of June, 1851, at 3½ o'clock, P. M.; and some papers &c. were read, but as the proceedings are already printed and distributed, we do not think it necessary to devote any more space to them.

MISCELLANY.

Although the present number contains twenty pages of unusually close printed matter more than its complement, we still find ourselves so cramped for room as to be obliged to defer several important matters till the next issue; among others, the report of the proceedings at the fifth annual meeting of the Association of Medical Superintendents of American Institutions for the Insane, which we think will be found highly interesting.

We proceed to submit to our readers the following condensed general view of the all important subject of Medical Education, now very properly engrossing so much of the attention of the profession. The views of such men as those whose names are appended to this document, cannot but command respect and ensure serious attention on the part of all interested in the matter; and who is not?

1. Medical instruction should be adapted to the power of students to receive and retain what is communicated to them, and should be confined to what is important to them in their subsequent life.

2. In modern times the constituent branches of medical science are so expanded, that they are not acquired by any physician in a life-time, and still less by a student during his pupilage. The same is true even of many individual branches. It is not, therefore, to be conceded that "a scheme of scientific instruction should embrace the whole science, and no part should be omitted;" nor that "a well-digested plan of lectures embraces all that is to be known and taught." Medical science has at this day become so unwieldy, and contains so much that is unnecessary, at least to beginners, that the attempt to explain to students the whole, is likely to involve the result of their learning but little.

3. In Chemistry, at the present time, a thorough adept is unknown. No man living knows all the recorded facts, or all that is to be known and taught, in that science. Organic chemistry alone fills large volumes, though yet in its infancy.

4. In Materia Medica there are some thousands of substances and their compounds, which possess what is called a medicinal power. Yet it is not probable that any physician effectively reads the one half, or remembers one quarter, or employs in his yearly practice one tenth, of the contents of the common dispensatories.

5. In Pathology, so complicated and various are the conditions attendant on the individual forms of disease, and their relations with idiosyncracy, temporary condition and external agency, with organic lesions and functional disturbances, that few of the most experienced pathologists can be said to understand their whole science, or to be always competent to its successful application.

6. In Etiology, the theoretical literature of causes has spread itself out to an extent, which is burdensome and unprofitable. It is true, that "man, from his nature, is subject to suffering, disease and death;"—but it is not equally apparent, that "the causes by which these conditions are produced, are ascertainable." We know nothing of the vehicle of cholera or influenza, nor is it probably in the power of any physician, by any art, or application of his knowledge, to produce in a given healthy man, a case of common pneumonia, or of acute rheumatism, —of diabetes or Bright's kidney, —of hypertrophy or of cancer, —or even of a common boil or wart.

7. In Therapeutics, many hundred volumes exist, such as would not have existed, could a knowledge of the cure of diseases be made so easily tangible, that it could be spread before the student in the three or five years of his pupilage.

8. In Anatomy, general and special, microscopic and transcendental; —in Physiology, with its intricate ramifications; —in Surgery, of which several subordinate specialities constitute distinct living professions, it is not to be admitted that the means or time of any ordinary course of lectures, can furnish full and complete instruction. Certainly it must be difficult to arrange a course of lectures on any of the extensive sciences which now constitute medicine, if it be indeed true, that "the teachers are not justifiable in suppressing any portion."

9. It is the business of lecturers in medical schools, to condense and abridge the sciences which they respectively teach, to distinguish their essential and elementary principles, to sift carefully the useful from the superfluous, and to confine the scope of their teachings, as far

as possible, to what is true and profitable, and likely to be remembered and used by their hearers. It is unfortunately too true that, "in an extended system of instruction, there is much that the student will not master, much that will have escaped his attention, much which he ought to know, that he has not learned." The remedy appears to be, to teach him well what he can and should master, and briefly to point out to him the sources, fortunately abundant, from which he may obtain the rest.

10. Much injury is done to the cause of true learning by medical assumption, amplification and exaggeration, by premature adoption of novelties, and by tenacity of theories, personal or espoused. Students, in all former years, have expended much time in learning, what it afterwards cost them both time and trouble to unlearn; — in acquiring, not merely the truths of science, but the crude announcements and plausible doctrines of sanguine or ingenious men. How much time has been wasted in some of our distinguished seminaries, in acquiring the visionary, and now neglected, theories of Rush and Broussais!

11. The most commonly exaggerated branch of medical science is Therapeutics. Enlightened physicians well know, that many diseases are incurable, and that others are subject to laws of duration, which cannot be interrupted by art. Yet students sometimes return from medical schools persuaded that their instructors knew how to cure a large part of these diseases, and that if others are less fortunate, it is attributable to their own fault.

12. Medical teachers should keep pace with the progress of their respective sciences. Yet in their haste for the promulgation of novelties, they should not omit to give the proper consideration to the older and more settled principles of science. Medical men are liable to commit the error of adopting premature opinions, unsound practice and inconvenient changes of language and nomenclature, sometimes from a love of display, and sometimes from a want of self-reliance, and a fear of being thought behind the literature of their time.

13. The length of a course of lectures is not the measure of its value to the student. A course of lectures should not outlast the curiosity of its hearers, nor their average pecuniary ability to attend. Custom in this country has generally fixed the limits of these things at about four months. A comprehensive and judicious course, confined to the enforcing of necessary points, is far more profitable than a more discursive course to a wearied and diminishing audience.

14. Lectures are chiefly wanted to impress by demonstration the practical branches of science, and they are most effective in places

where the facilities for such demonstrations can be commanded. Anatomy requires extensive exhibitions by the teacher, and personal dissections by the student. Chemistry and Materia Medica require illustrations by specimens and experiments. Pathology needs the aid of autopsies, museums and the clinical demonstrations of large hospitals.—A knowledge of Obstetrics is not perfected without aparatus and practice. Surgery is acquired by witnessing numerous operations, surgical diseases, illustrated explanations, and by personal practice on the dead body. Physical exploration is wholly demonstrative. A knowledge of ausculation can no more be acquired from books, or abstract lectures, than a knowledge of music or of individual physiognomy.

15. The intermediate period between lectures, should be spent by students in active and original study, approved and confirmed by regular recitations, and by such opportunities as can be commanded, for practical, personal experience. Private schools for small classes, and the private teachings of individuals, who are suitably qualified and situated, are more advantageous for two-thirds of the year, than either the fatiguing jostle of overcrowded rooms, or the listless routine kept up by the survivors of a passive class.

16. The usefulness of a medical school depends not so much on the length of its session, as upon the amount of education, preliminary and ultimate, which it requires, the fidelity with which it exacts its own professed requisitions, and the train of healthy exertion, active inquiry, and rigid, methodical, self-regulating study, to which it introduces its pupils. The longest lectures are of little use to students who want a common education, and whose medical education does not qualify them afterwards to observe, to inquire, and to discriminate. The exact evidence of three years of well-conducted study, is better than the exhibited ticket of a six months course.

17. The subjects most important to be well taught in medical schools, are the elementary principles which constitute the frame-work of medical science, and the mode of thought and inquiry which leads to just reasoning upon them. After these, most attention should be given to selecting and enforcing such practical truths, as will most certainly be wanted by the young practitioner in his future career of responsibility.

18. The things to be avoided by medical teachers, are technicalities which are unintelligible to beginners,—gratuitous assumptions and citations of doubtful authorities,—prolix dissertations on speculative topics,

—excessive minuteness in regard to subjects, which are intricate and but little used, and therefore destined to be speedily forgotten. To these may be added controversies, superflous personal eulogiums and criminations, and all self-exaggeration, personal or local.

JACOB BIGELOW, Prof. of Materia Medica and Clinical Medicine.
WALTER CHANNING, Prof. of Midwifery and Med. Juris.
JOHN WARE, Prof. of Theory and Practice of Medicine.
JOHN B. S. JACKSON, Prof. of Pathological Anatomy.
OLIVER W. HOLMES, Prof of Anatomy and Physiology.
HENRY J. BIGELOW, Prof. of Surgery.
E. N. HORSFORD, Prof. of Chemistry.

STARLING MEDICAL COLLEGE.—The preliminary course in this College will commence on Wednesday, the 16th of October, and four lectures a day will be given, so that some of the more important specialties of Medicine and Surgery, will be more fully treated of than would be possible during the regular session. This will commence on Monday, the 6th of November, and continue sixteen weeks, six lectures a day being delivered.

The chair of Theory and Practice, vacated by the resignation of the Editor of this Journal, in consequence of his being appointed Superintendent of the Ohio Lunatic Asylum, will be filled by the transfer of Prof. S. M. SMITH from the chair of Materia Medica and Therapeutics, to which Prof. CHARLES A. LEE, of New York, has been appointed. So organized, we feel confident that the Faculty of Starling Medical College, will show, by renewed zeal and untiring efforts, that the Institution has not only merited its very remarkable success, but that it will honorably play its part in elevating the standard of medical education, and is determined to earn the respect and the confidence of the profession and the public.

MEDICAL COLLEGE OF OHIO.—The chair of Anatomy, in this Institution, has become vacant by the demise of Prof. JOHN T. SHOTWELL. Dr. SHOTWELL, whose death has stricken with affliction a large circle of friends, had but recently been re-appointed to the Professorship he had so long held. The Restor of the Profession in the West, DANIEL DRAKE, has resigned the chair of "Practice," intending to devote himself, with his well known intensity of application, to the production of the second volume of his great work. His place in the Faculty will be filled by Dr. JOHN BELL, of Philadelphia, the well known author, who

will remove permanently to Cincinnati. We congratulate the West on the acquisition. Dr. T. O. Edwards, to whose efforts the Profession is so much indebted for the passing by Congress of the law regulating the importation of drugs, has been appointed to the chair of Materia Medica, &c.

University of Pennsylvania. — The chair of Theory and Practice in this Institution, held for more than forty years by the venerable Chapman, has, on his resignation, been filled by the transfer of Dr. Geo. B. Wood, who is succeeded in the chair of Materia Medica by Dr. Carson.

The Medical Faculty of the University of New York have adveritsed for applications from candidates for the chairs of Institutes and Practice, and Principles, Practice, and Operations of Surgery. Dr. Mott is said to have sent home his resignation from Europe, on hearing that Dr. Dehnold was appointed in place of Professor Dickson, and Dr. Dehnold then tendered his resignation.

Prof. B. W. Dudley has resigned the chair of Surgery, which he had so long held, retiring with the reputation of having been one of the best lecturers in these United States. His unprecedented success in the operation for Lithotomy, is one of the brightest gems in the coronet of his great fame as a Surgeon.

The Lexington School is no more, that is, at Lexington, having been re-organized as the Kentucky School of Medicine, at Louisville, under the auspices of the Masonic University of Kentucky.

New Medical Journals. — We have received the fifth number of the *New York Medical Gazette and Journal of Health*, published weekly, and edited by D. M. Reese, M. D. The well known ability of the editor, will make this a popular journal with the profession, a useful one to the public, and a welcome exchange to us.

The first number of the *New Hampshire Journal of Medicine*, edited by Edward H. Parker, has also reached us; modest in its pretensions, the hope of the editor is to fill its pages with original articles, not to offer any one a mere reprint of what he has seen elsewhere. We wish the editor joy of his task of drumming up contributors, and hope he will prove more successful than we have been in that vocation; at the same time bidding him cordially "God speed."

PECCAVI!—During our absence from "the sanctum," while attending the Convention of Medical Superintendents of American Hospitals for the Insane, at Boston, we were obliged to entrust the correction of the press to an inexperienced friend, and we found, to our extreme regret that several articles were not properly credited to the respective sources from which they were borrowed. More particularly are we concerned that the article on Croup, by our much esteemed friend Dr. JNO. WARE, was not attributed to the periodical in which it originally appeared, namely, that excellent weekly the *Boston Medical and Surgical Journal*.

CHOLERA IN COLUMBUS.—We are sorry to write that our hopes with regard to the spread of cholera in this city, were doomed to a most pianful disappointment, the disease since the publication of our last number, having assumed an epidemic form of unusual severity. From the 24th July to the 25th August, inclusive, the Board of Health have reported 279 deaths, of which 195 were of cholera, and 84 of other diseases. Considering the small population of the city during the epidemic, this must be looked upon as a great mortality. We write this on the 26th August, and are happy to report no death of any disease for the last 24 hours. In the Penitentiary, which experienced so severe a visitation last year, there has not been a death for over twelve months, and the Asylums, one and all, have enjoyed a remarkable immunity from disease of all kinds. Nothing has occurred in the Lunatic Asylum, to mark the existence of any so-called cholera atmosphere,—quite the contrary.

OBITUARY.

DEATH OF DR. PROUT F. R. S.—This distinguished member of the medical profession expired at his residence, Sackville-street, Picadilly, on the 9th ultimo, at an advanced age. Dr. Prout was deservedly well known for his various contributions to medical science, particularly for his Bridge-water Treatise on Chemistry, Metheology, and the Function of Digestion considered with reference to Natural Theology. The lamented deceased had also contributed many valuable papers to the Philosophical Transactions.

ADVERTISEMENTS.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF BUFFALO.

SESSION OF 1850-51.

The next regular Term of Lectures in this Institution will commence on the first Wednesday in November, 1850, and continue sixteen weeks.

Charles Brodhead Coventry, D D., Prof. of Physiology and Medical Jurisprudence, and Dean of the Faculty.

Charles Alfred Lee, Prof. of Pathology and Materia Medica.

James Webster, M. D., Prof. of General and Special Anatomy.

James Platt White, M. D., Prof. of Obstetrics, and Diseases of Women and Children.

Frank Hastings Hamilton, M. D., Prof. of Principles and Practice of Surgery and Clinical Surgery.

Austin Flint, M., D., Prof. of Principles and Practice of Medicine and Clinical Medicine.

George Hadley, M. D., Prof. of Chemistry and Pharmacy, Registrar and Treasurer.

Gorydon LaFord, M. D., Demonstrator of Anatomy.

A Preliminary term will commence on the *first Wednesday in October*, 1850, and continue to the beginning of the *regular term*. The preliminary term will be devoted to Dissections, Clinical instruction in connection with the Hospital, and daily lectures on special subjects, as follows:

On Generation and Puerperal Fever, by Prof. White.

On Syphilis and Ophthalmic Surgery, by Prof. Hamilton.

On* by Prof. Hadley.

On Microscopical Anatomy, by Dr. Ford.

No charges will be made for attendance at the Preliminary term, except for the Matriculation, Hospital, and Demonstrator's Tickets, (which are for the term) and the actual cost of Anatomical material.

Students are invited to attend at the *preliminary* term, whether designing to continue through the regular term, or not; and all intending to enter the class at the regular term, are recommended to avail themselves of the extended period of instruction afforded by the preliminary term.

Students are admitted to visit the wards of the *Buffalo Hospital of the Sisters of Charity*, from Oct. 1, to April 1, accompanying the attending Surgeon and Physician (the Professors of Medicine and Surgery,) on the payment of $5, for the benefit of the Hospital. This Institution has been enlarged to twice its former size since the last Session of Lectures, and affords ample opportunities for Clinical illustrations, and numerous Surgical operations.

The whole amount of the Professors' Ticket Fees is $65,00. Matriculation Fee $3,00. Demonstrator's Ticket, $5,00. Graduating Fee, $20.

Board, including fuel and light, may be obtained in good private and public houses at from $2 to $3 per week.

*Subjects announced hereafter.

Massachusetts Medical College.

THE Medical Lectures of Harvard University will commence at the Massachusetts Medical College, in Boston, on the first Wednesday in November.

Obstetrics and Medical Jurisprudence, by Walter Channing, M. D.
Materia Medica and Clinical Medicine, by Jacob Bigelow, M. D.
Theory and Practice of Medicine, by John Ware, M. D.
Chemistry, by E. N. Horsford, M. D.
Pathological Anatomy, by John B. S. Jackson, M. D.
Anatomy and Physiology, by Oliver W. Holmes, M. D.
Principles and Operations of Surgery, by Henry J. Bigelow, M. D.

Clinical Lectures at the Massachusetts General Hospital three times a week by the Professors of Clinical Medicine and of Surgery. Surgical operations are very numerous. The safe and effectual practice of etherization is taught in this School. Practical Anatomy is amply provided for by new and liberal arrangements.

Fees for the whole Course, $80. Matriculation, $3. Dissecting Ticket, $5. Graduation, $20. Hospital and Library gratuitous.

A descriptive pamphlet may be had by application, post paid to David Clapp, Printer, corner of Washington and Franklin streets, Boston.

The Tremont-Street School, for private pupils, having all the advantages of the Hospital, Dissecting Room, and of daily recitations throughout the year on the branches of medical science, is conducted by Drs. Bigelow, Storer, Jackson, Holmes, and H. J. Bigelow, four of whom are Physicians and Surgeons of the Hospital.

Boston, July 1849.

Rush Medical College,

CHICAGO, ILLINOIS.

SESSION OF 1850–51.

The next annual course of Lectures will commence on the first Monday in November and continue sixteen weeks.

DANIEL BRAINARD, M. D., Professor of Surgery and President of the College.
JAMES V. Z. BLANEY, M. D., Prof. of Chemistry and Pharmacy.
JOHN McLEAN, M. D., Prof. of Mat., Med. and Therapeutics and Medical Jurisprudence.
WM. B. HERRICK, M. D., Prof. of Anatomy and Physiology.
JOHN EVENS, M. D., Prof. of Obstetrics and Diseases of Women and Children.
THOMAS SPENCER, M. D., Prof. of Theory and Practice of Medicine.
N. S. DAVIS, M. D., Prof. of Pathology and Clinical Medicine.
J. W. FREER, M. D., Demonstrator of Anatomy.

The fees for a full course of Lectures are $35, in advance. Graduation fee, $20. Dissecting Ticket, $5. Matriculation ticket and ticket for admission to Hospital, free.

Good board can be procured for $2 and $2 25, per week.

N. S. DAVIS, Sec'y of Faculty,
65 Lake street, Chicago.

August 8, 1850.

College of Physicians and Surgeons

OF THE

UNIVERSITY OF THE STATE OF NEW YORK.

The Forty-fourth Session of the College will be commenced on Monday, 14th October, 1850, and contined until March 13th, 1851, (commencement day.)

ALEXANDER H. STEVENS, M. D., L. L. D., President of the College and Emeritus Professor of Clinical Surgery.

JOSEPH M. SMITH, M. D., Professor of the Theory and Practice of Medicine and Clinical Medicine.

JOHN B. BECK, M. D., Professor of Materia Medica and Medical Jurisprudence.

JOHN TORREY, M.D., L.L.D., Professor of Botany and Chemistry.

ROBERT WATTS, Jr., M.D., Professor of Anatomy.

WILLARD PARKER, M.D., Professor of the Principles and Practice of Surgery.

CHANDLER R. GILMAN, M.D., Professor of Obstetrics and the Diseases of Women and Children.

ALONZO CLARK, M.D., Professor of Physiology and Pathology (including Microscopy.)

CHARLES E. ISAACS, M.D., Demonstrator of Anatomy.

FEES. — Matriculation Fee, $5 ; Fees for the full course of Lectures, $94 ; Demonstrator's Ticket, $5 ; Graduation Fee, $25 ; Board, average $3 per week.

Clinical Instruction is given at the New York Hospital daily, by the Medical Officers, (Professor Smith being one them,) fee $8 per annum ; at the Bellevue Hospital twice a week, without fee, (Professors Parker and Clark belonging to the Medical Staff ;) at the Eye Infirmary, without fee ; and upwards of 1000 patients are annually exhibited to the class in the College Clinique. Obstetrical cases and subjects for dissection are abundantly furnished through the respective departments.

The Annual Commencement is held at the close of the Session ; there is also a Semi-Annual Examination on the second Tuesday of September. The pre-requisites for Graduation are—21 years of age, three years of study, including two full courses of Lectures, the *last* of which must have been attended in this College, and the presentation of a Thesis on some subject connected with Medical Science.

In addition to the regular Course, and not interfering with it, a Course of Lectures will be commenced on Monday, 30th September, and continued until the 14th October.

This course will be *free*.

R. WATTS, Jr., M.D., Sec'y to the Faculty.

College of Physicians and Surgeons,
67 Crosby street, New York. sept—2t

MEDICAL COLLEGE OF OHIO.

SESSION OF 1850-'51.

THE THIRTY-FIRST ANNUAL SESSION OF THIS INSTITUTION will open on the FIRST MONDAY IN NOVEMBER NEXT, and close on the last of February, under the following arrangements:

JOHN P. SHOTWELL, M. D., Professor of Anatomy.

JOHN LOCKE, M. D., Professor of Chemistry and Pharmacy.

L. M. LAWSON, M. D., Professor of Physiology and Pathology.

T. O. EDWARDS, M. D., Professor of Materia Medica and Therapeutics, and Medical Jurisprudence.

R. D. MUSSEY, M. D., Professor of Surgery.

LANDON C. RIVES, M. D., Professor of Obstetrics and the Diseases of Women and Children.

JOHN BELL, M. D., Professor of Theory and Practice of Medicine.

JOHN DAVIS, M. D., Demonstrator of Anatomy.

☞The following branches will be included in the course: *Anatomy, Chemistry, Pharmacy, Physiology, Pathology, Materia Medica, Therapeutics, Medical Jurisprudence, Medical Botany, Surgery, Obstetrics, Diseases of Females, Diseases of Children, Practical Medicine,* and *Physical Diagnosis.*

☞The DISSECTING ROOMS will be opened for classes on the 1st of October.

☞CLINICAL LECTURES, on Medicine and Surgery, will be delivered at the Commercial Hospital three times a week.

OCTOBER LECTURES.

A Course of Lectures will be delivered by the Faculty, (free of charge,) commencing on the first of October, and embracing the following subjects:

Anatomy and Physiology of the Senses; Diseases of the Eye; Medical and Elementary Botany; Functional and Organic Diseases of the Uterus; Medical Jurisprudence; Physical Diagnosis.

☞Also, CLINICAL LECTURES at the Commercial Hospital.

FEES.—For a full Course of Lectures, $84; Matriculation and Library Ticket, $5; Dissecting Ticket, $8; Graduation Fee, $20; Hospital Ticket, $5.

☞Board (including the expenses of room, fuel, and lights,) can be obtained at from $2 to $3 per week.

Further information may be obtained by addressing the Dean.

L. M. LAWSON, M. D., *Dean of the Faculty.*

South side of Sixth st., between Walnut and Vine.

CINCINNATI, July, 1850.

VACCINE VIRUS.—Physicians in any section of the United States, can procure ten quils charged with *Pure Vaccine Virus* by return of mail, on addressing the Editor of the Boston Medical and Surgical Journal, enclosing one dollar, *post paid,* without which no letter will be taken from the office.

Nov. 1, 1849.—tf.

Starling Medical College.

THE annual course of Lectures will commence on the first Wednesday in November next, (Nov. 7, 1850,) and continue sixteen weeks.—The preliminary course will commence on the first Wednesday in October, during which month there will be three lectures daily.

In October the following subjects will be taught:

Minor Surgery - - - - - -	Dr. Howard.
Insanity - - - - - - -	Dr. Smith.
Poisons, illustrated by experiments upon the lower animals - - - - - -	Dr. Carter.
Microscopical Anatomy - - - -	Dr. Judkins.
Physical Diagnosis - - - - -	Dr. S. H. Smith.

This course is *free*, and it is hoped as many students as possible will avail themselves of its advantages.

FACULTY.

Henry H. Childs, M. D. Prof. of Obstetrics and Diseases of Women and Children.

S. Hanbury Smith, M. D., Prof. of the Practice of Medicine.

Richard L. Howard, M. D., Prof. of Surgery.

Jesse P. Judkins, M. D., Prof. of General and Special Anatomy.

Samuel M. Smith, M. D., Prof. of Materia Medica, Therapeutics and Medical Jurisprudence.

Francis Carter, M. D., Prof. of Physiology and General Pathology.

Frederick Merrick, M. D., Prof. of Chemistry and Botany.

Norman Gay, M. D., Demonstrator of Anatomy.

FEES.

Lectures, - - - - -	$56 00	Matriculation, - - - - -	$3 00
Graduation, - - - - -	20 00	Dissecting Ticket, - - - -	5 00

Numerous cases and Surgical operations are brought before the Class. Ample facilities are afforded to those who wish to pursue Practical Anatomy. The means of Illustration in all the Departments are ample:—among these are two superior compound Microscopes.

Good Board may be obtained at from $1,50 to 2,00 per week.

SAM'L M. SMITH.
Dean of the Faculty.

Circular.

THE subscriber having become the owner of the right of P. Coad's Patent Electro Galvanic Battery and Patent Insulated Poles, for medical purposes, in the following counties in the State of Ohio* now offers the same for sale, either in Individual or County rights.

The unqualified approbation of every scientific Gentleman and Physician which has been given to the above Instrument, wherever it has

*Paulding, Van Wert, Mercer, Darke, Preble, Butler, Clermont, Warren, Montgomery, Miami, Shelby, Clark, Greene, Clinton, Brown, Adams, Highland, Fayette, Madison, Franklin, Pickaway, Ross, Pike, Scioto, Lawrence, Gallia, Jackson, Hocking, Meigs, Athens, Washington, Morgan and Monroe.

been used or exhibited, induces the undersigned, now to offer it to the Public, believing that no other Instrument of the kind has ever been invented by which the Electric fluid can be applied with such safety, certainty, expedition and effect.

The efficacy of the Galvanic fluid in the cure of numerous diseases, (when it can be administered with safety and the best effect,) has been supported by many of the best medical authorities both in Europe and America which may be consulted at pleasure.

By means of the above Apparatus and the Poles which accompany it for the various organs and other parts of the Body, the Electric Fluid is for the first time brought under the entire control of man.

It is by this Instrument and no other ever seen or known, that the operator can convey Electric Fluid in definite quantities to suit any part of the body, even the brain of an Infant with perfect safety in a gentle current, without shocks, pain, or any disagreeable sensation.

From this state of mildness, the operator can, in a moment, increase the power to any quantity that may be required, and no eminent Physician, County Infirmary or Hospital, should be without one.

The above Instrument is portable, and can always be in readiness for use in one minute of time.

For terms either for Individual or County rights, address the undersigned, either in person or by letter, (if by letter, post paid,) and prompt attention will be given.

Columbus, Ohio. JAMES W. WATSON.